



# **Southwest Georgia Interstate Study**

## **Technical Memorandum**

### **Socioeconomic & Demographic Data**

## **1.0 Base Year Socioeconomic and Demographic Data**

### **1.1 Purpose**

A comprehensive collection and review of socioeconomic and demographic data for the study area was performed. This data will provide valuable insight to the unique characteristics of the residents and employees of the study area. In addition, this information will be used to assist with the development and application of the travel demand model as well as the development of the Public Involvement Plan.

Population and employment data are some of the key data inputs to the development and application of the travel demand model used for this study. The purpose of developing 2006 base year population and employment information is to provide data for use in modeling the Southwest Georgia Interstate Study (SWGIS) area transportation system for existing conditions. Reliable data is needed to ensure that the transportation model accurately reflects current transportation system conditions. Population and employment data was collected and developed for the study area as well as the rest of the country. The travel demand model developed for this study encompasses the entire continental United States to improve the model's representation of inter- and intra-state trips as well as freight and goods movements. The difference between the level of detail and sources of data for the different geographic areas is discussed in the following sections.

### **1.1 Study Area**

The collection of data inside the 32 county study area was performed at the traffic analysis zone level (TAZ) identified in Figure 1.2.1. Traffic analysis zones are subdivisions of census tracts. A detailed discussion on the development of the TAZ structure is contained in Technical Memorandum #5. There are 933 TAZs within the study area.

#### ***1.1.1 Population***

In order to estimate the 2006 population by TAZ for the study area, Census data for 2000 and 2006 census county population estimates were downloaded from the Census Bureau website. Census boundaries and data were imported into ARCGIS. Census block forecasts were disaggregated from the 2006 county level population estimates based on their share of 2000 population. The Census blocks were aggregated into each TAZ based on their geographic boundary limits relative to TAZ boundary. Population of the blocks within the TAZ boundary was summed for that TAZ, the total population share relative to the county was calculated. All TAZs within the southwest Georgia area



## **Southwest Georgia Interstate Study**

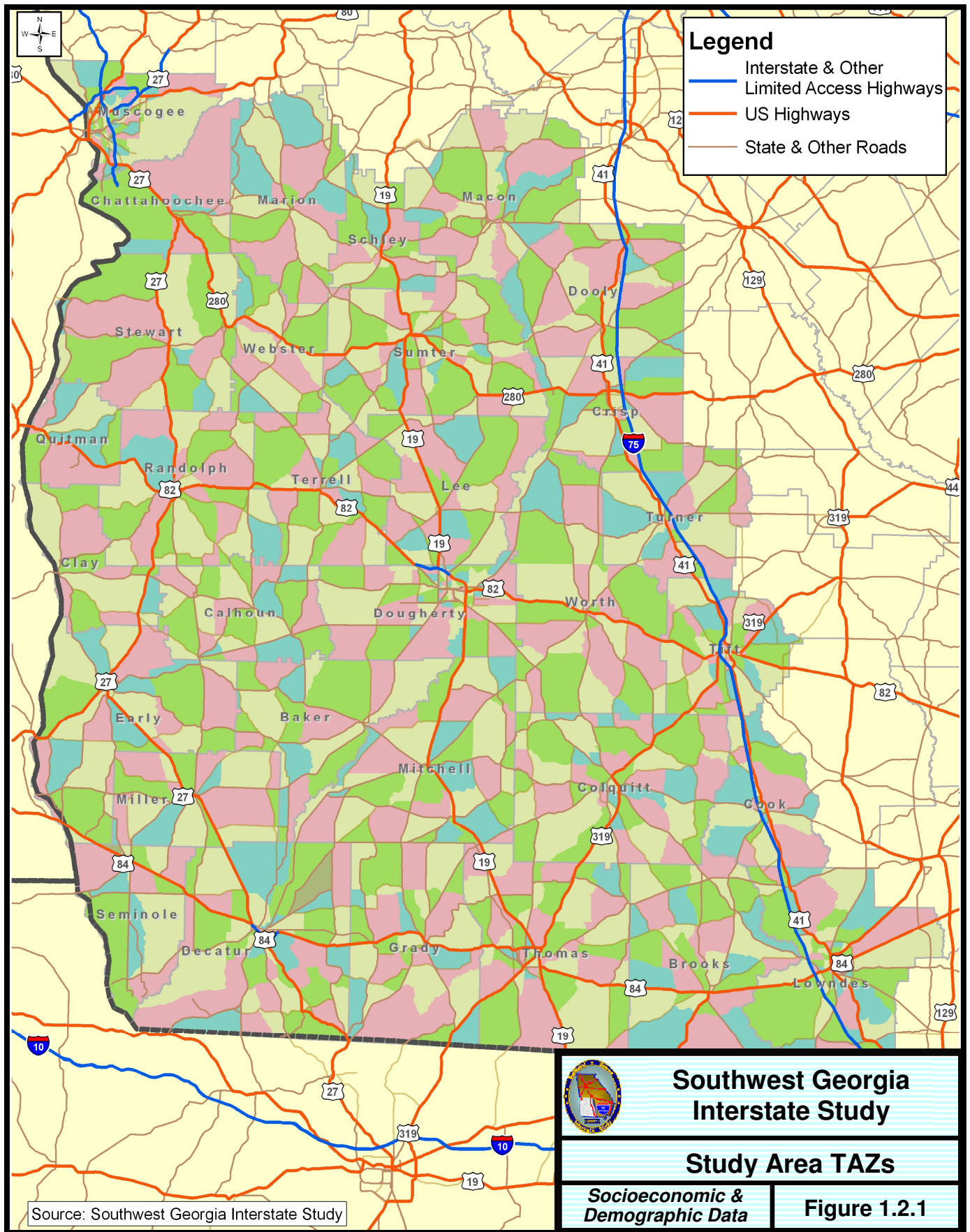
### ***Technical Memorandum***

### ***Socioeconomic & Demographic Data***

are subdivisions of single tracts and can be aggregated to census tracts. Population by county is listed in Table 1.2.1.1 and Figure 1.2.1.1 shows the 2006 population estimates by TAZ. The largest concentrations of population are located in the urban areas of Columbus, Albany and Valdosta

#### Process:

- Developed census boundaries for county, census tract and census block group data within ArcGIS.
- Populated ArcGIS census layers with relevant information from 2000 census and 2006 census population estimates.
- Calculated the proportion of each county's population within each census tract using 2000 census data.
- Calculated the geographic proportion of each TAZ within each census tract using ArcGIS and applied this proportion to census 2006 county population estimates to estimate TAZ population for 2006.
- Households were forecast assuming that the ratio of population per household at the census tract level for 2000 would remain constant.





# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

#### 1.1.2 Households

In order to estimate the 2006 households by TAZ for the study area, 2006 census county population estimates were factored by the ratio of population to households from the 2000 census and applied to the TAZ level estimated 2006 population. Households by county are listed in Table 1.2.2.1 below and Figure 1.2.2.1 shows the 2006 household estimates by TAZ.

Process:

- Developed ratio of population to households by county from 2000 census data
- Applied the 2000 census ratio of population to households at the county level to 2006 census county population estimates and apportioned to TAZs based on the estimated proportion of county population within each TAZ.

**Table 1.2.1.1**  
**County Population 1970 - 2006**

County	1970	1980	1990	2000	2006
Baker	3,875	3,808	3,615	4,074	4,098
Brooks	13,739	15,255	15,398	16,450	16,464
Calhoun	6,606	5,717	5,013	6,320	6,094
Chattahoochee	25,813	21,732	16,934	14,882	14,041
Clay	3,636	3,553	3,364	3,357	3,180
Colquitt	32,200	35,376	36,645	42,053	44,821
Cook	12,129	13,490	13,456	15,771	16,333
Crisp	18,087	19,489	20,011	21,996	22,051
Decatur	22,310	25,495	25,511	28,240	28,665
Dooley	10,404	10,826	9,901	11,525	11,748
Dougherty	89,639	100,718	96,311	96,065	94,773
Early	12,682	13,158	11,854	12,354	12,065
Grady	17,826	19,845	20,279	23,659	25,082
Lee	7,044	11,684	16,250	24,757	32,495
Lowndes	55,112	67,972	75,981	92,115	97,844
Macon	15,276	14,003	13,114	14,074	13,817
Marion	12,933	5,297	5,590	7,144	7,276
Miller	6,397	7,038	6,280	6,383	6,239
Mitchell	18,956	21,114	20,275	23,932	23,852
Muscogee	167,377	170,108	179,278	186,291	188,660
Quitman	2,180	2,357	2,209	2,598	2,486
Randolph	8,734	9,599	8,023	7,791	7,357
Schley	3,097	3,433	3,588	3,766	4,198
Seminole	7,059	9,057	9,010	9,369	9,168





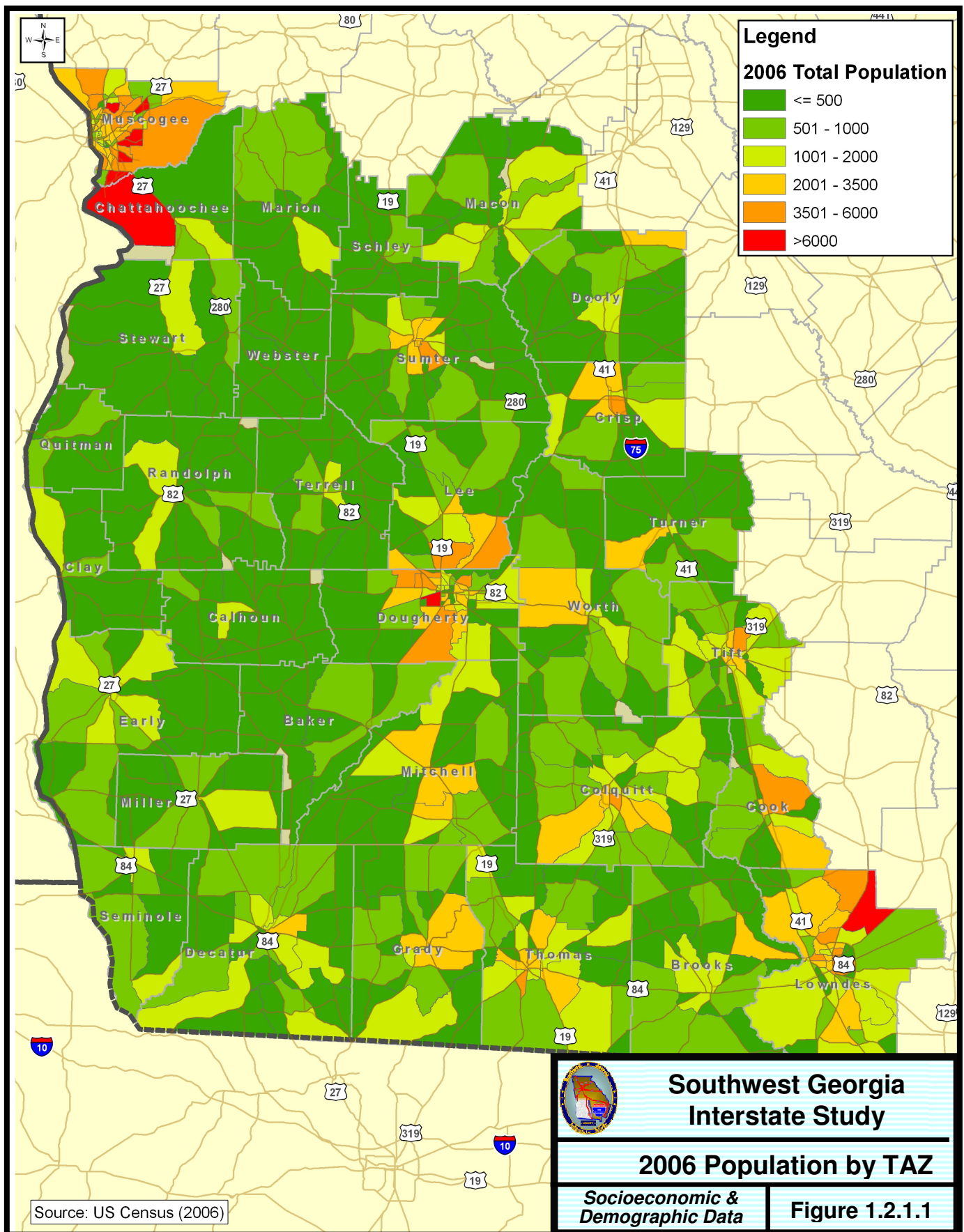
# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

County	1970	1980	1990	2000	2006
Stewart	6,511	5,896	5,654	5,252	4,754
Sumter	26,931	29,360	30,228	33,200	32,490
Terrell	11,416	12,017	10,653	10,970	10,657
Thomas	34,515	38,098	38,986	42,737	45,135
Tift	27,288	32,862	34,998	38,407	41,685
Turner	8,790	9,510	8,703	9,504	9,322
Webster	2,362	2,341	2,263	2,390	2,252
Worth	14,770	18,064	19,745	21,967	21,938
TOTAL	705,694	758,272	769,120	839,393	861,040

Source: US Department of Commerce, Census Bureau





# Southwest Georgia Interstate Study

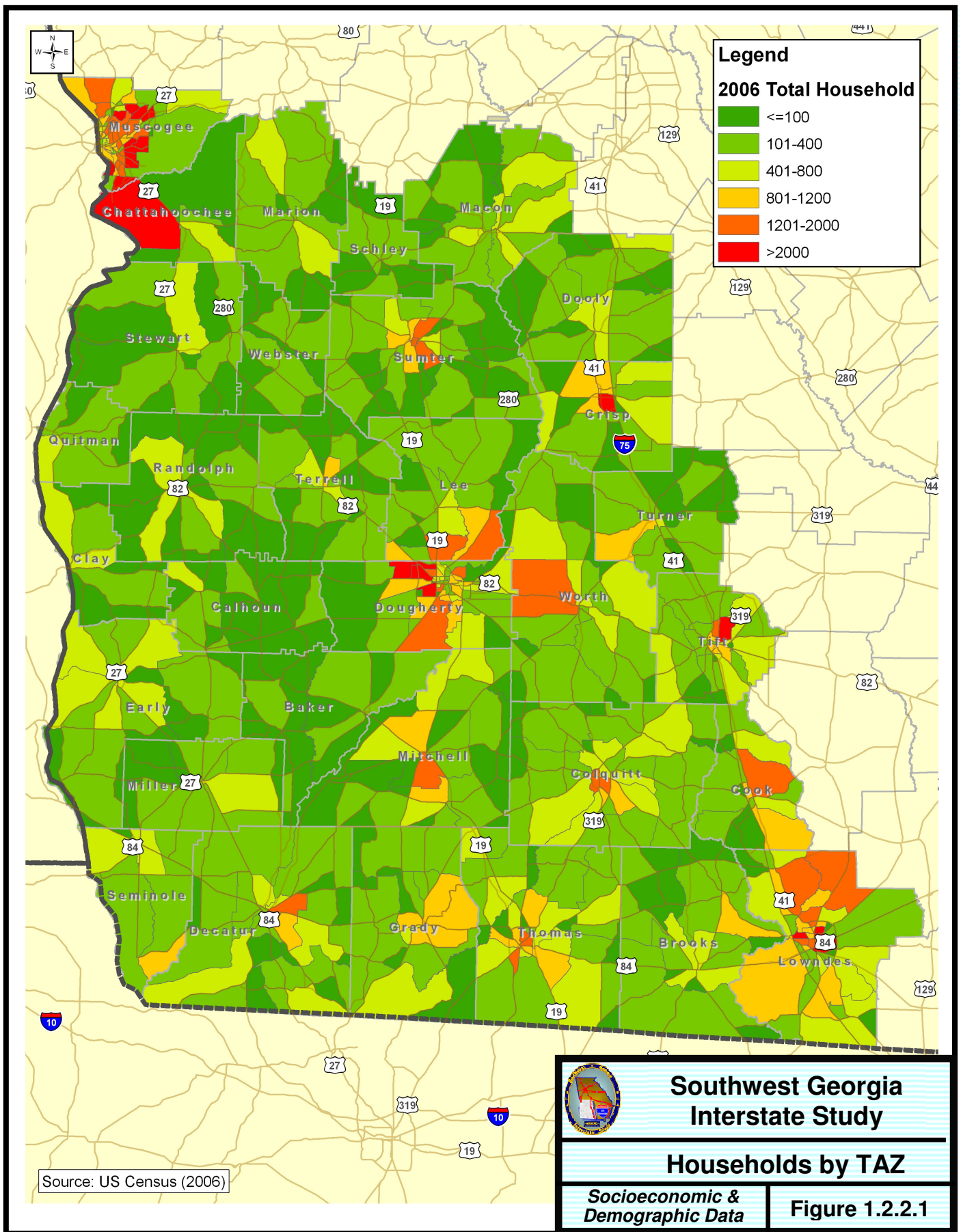
## Technical Memorandum

### Socioeconomic & Demographic Data

Table 1.2.2.1  
County Households 1970 - 2006

County	1970	1980	1990	2000	2006
Baker	1,057	1,208	1,300	1,514	1,520
Brooks	3,992	4,990	5,392	6,155	6,303
Calhoun	1,824	1,833	1,794	1,962	2,478
Chattahoochee	2,035	3,012	2,884	2,932	4,364
Clay	1,073	1,193	1,210	1,347	1,370
Colquitt	9,769	12,152	12,980	15,495	15,990
Cook	3,564	4,476	4,825	5,882	5,974
Crisp	5,465	6,559	7,287	8,337	8,526
Decatur	6,430	8,315	8,962	10,380	10,657
Dooly	3,030	3,529	3,557	3,909	4,399
Dougherty	25,190	33,043	34,163	35,552	37,234
Early	3,716	4,303	4,263	4,695	4,788
Grady	5,394	6,620	7,354	8,797	8,894
Lee	1,879	3,642	5,199	8,229	8,508
Lowndes	15,945	22,609	26,311	32,654	35,293
Macon	3,474	4,371	4,388	4,834	5,193
Marion	1,410	1,687	1,962	2,668	2,696
Miller	1,919	2,405	2,336	2,487	2,543
Mitchell	5,343	6,486	6,798	8,063	8,799
Muscogee	52,303	59,112	65,858	69,819	73,343
Quitman	588	772	857	1,047	1,048
Randolph	2,623	3,126	2,815	2,909	3,032
Schley	908	1,125	1,315	1,435	1,437
Seminole	2,117	3,051	3,137	3,573	3,689
Stewart	1,782	1,891	1,982	2,007	2,118
Sumter	7,613	9,465	10,484	12,025	12,576
Terrell	3,256	3,839	3,738	4,002	4,078
Thomas	10,112	12,789	14,323	16,309	16,760
Tift	7,877	10,737	12,184	13,919	14,493
Turner	2,611	3,078	3,043	3,435	3,494
Webster	641	756	798	911	912
Worth	4,224	5,811	6,895	8,106	8,197
TOTAL	199,164	247,985	270,394	305,389	320,704

Source: Estimated from US Department of Commerce, Census Bureau data







## **Southwest Georgia Interstate Study**

# **Technical Memorandum**

## **Socioeconomic & Demographic Data**

### ***1.1.3 Employment***

Proprietary employment records from the Georgia Department of Labor were obtained by GDOT for specific use in the Southwest Georgia Interstate Study. In the Georgia Department of Labor ES-202 data set for the Southwest Georgia Interstate Study area there were 22,672 employer records for 2006. 20,607 of these records were geocoded to longitude/latitude coordinates based on their address; however, 301 of these were outside the study area. We address matched ungeocoded records with sufficient address information to coordinate locations using a Census TIGER file base map layer in ARCGIS. An additional 443 records were attributed longitude/latitude coordinates based on this automated address matching process. A further 115 records were attributed with longitude/latitude coordinates based on manual/hand matching to location based on a review of available public address records for businesses.

After these records were compiled for display within ArcGIS, it was noted that there were many longitude/latitude coordinates with multiple employers ascribed to the same location. For quality control purposes, all records with the same longitude/latitude coordinates were examined to see if they were reasonably geocoded. Those that were not reasonably collocated, i.e. had different addresses, and could possibly be address matched, were flagged and readdress matched using the TIGER base file. As a result of this process 412 employer records were regeocoded to better match their stated address. After these geocoding processes, each of the records within the Southwest Georgia Interstate Study area was given a TAZ code based on the location of the longitude/latitude coordinate point for the address within the TAZ layer prepared for the Southwest Georgia Interstate Study model. Military employment was manually added to the TAZs containing Fort Benning, the Marine Corps Logistics Base, and Moody Air force Base because the employer records in the ES-202 data set did not have address information.

The final geocoded employment database has 20,843 records within the Southwest Georgia Interstate Study area representing 350,706 total employment. This is approximately 98.5% of the total employment from the GDOL County Profiles for the SWGIS study area. Employment was factored up to 355,999 to reflect the total study area employment control total. Table 1.2.3.1 shows the estimated employment by type for each of the counties in the study area and Figure 1.2.3.1 shows the distribution of estimated 2006 employment by TAZ.





# Southwest Georgia Interstate Study

## Technical Memorandum

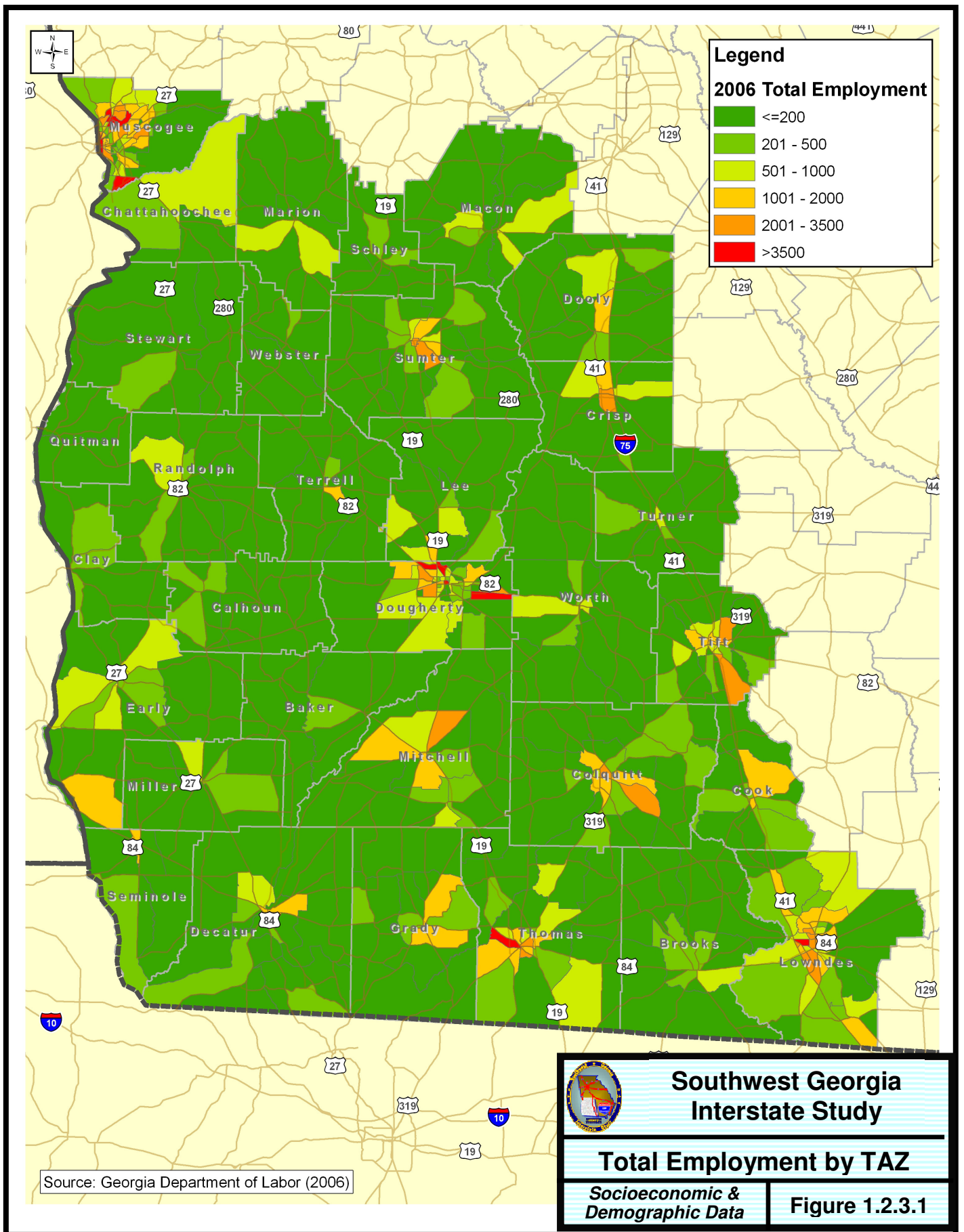
### Socioeconomic & Demographic Data

Table 1.2.3.1  
2006 County Employment by Sector

COUNTY	AMC	MFG	WFW	RET	SER	TOTAL
Baker	68	0	7	47	401	523
Brooks	579	555	126	282	1,472	3,015
Calhoun	185	254	72	145	936	1,592
Chattahoochee	55	0	55	87	1,186	1,382
Clay	250	0	13	101	467	831
Colquitt	2,328	3,961	715	1,885	7,333	16,221
Cook	839	1,056	138	451	2,294	4,778
Crisp	645	1,219	706	1,551	4,785	8,907
Decatur	1,372	1,379	733	1,556	5,202	10,242
Dooly	140	1,218	368	303	1,416	3,446
Dougherty	2,253	5,907	3,874	6,555	33,053	51,641
Early	524	1,014	476	366	2,315	4,696
Grady	1,107	948	428	787	3,187	6,457
Lee	1,099	228	358	541	2,644	4,870
Lowndes	3,047	5,485	2,760	8,309	29,801	49,402
Macon	344	982	89	425	1,798	3,637
Marion	218	673	30	137	656	1,714
Miller	142	34	193	234	1,094	1,697
Mitchell	576	3,344	445	830	3,654	8,849
Muscogee	4,675	9,895	2,880	11,440	69,046	97,936
Quitman	52	79	45	43	203	422
Randolph	405	194	116	169	1,318	2,202
Schley	36	772	77	73	465	1,423
Seminole	240	123	152	359	1,475	2,349
Stewart	65	110	62	92	734	1,064
Sumter	1,269	2,299	818	1,444	7,006	12,837
Terrell	119	508	256	278	1,254	2,415
Thomas	1,367	3,594	1,341	2,387	15,122	23,811
Tift	1,723	2,913	2,702	2,686	10,991	21,016
Turner	128	405	248	378	1,470	2,628
Webster	30	292	23	27	178	550
Worth	332	242	193	556	2,122	3,446
TOTAL	26,211	49,685	20,500	44,523	215,080	355,999

Source: Georgia Department of Labor

KEY: AMC = Agricultural/Mining/Construction, MFG = Manufacturing,  
WFW = Wholesale/Freight/Warehousing, RET = Retail, SER = Service





## **Southwest Georgia Interstate Study**

# **Technical Memorandum**

# **Socioeconomic & Demographic Data**

### **1.2 Supplemental Information for the Study Area**

The US Census 2000 contains a variety of demographic characteristics that provide a broad brush picture of the region. Identifying these characteristics and understanding their impact on travel patterns within a specific project area is crucial. In addition these data can be used to assist with the design and development of a public outreach and involvement program to solicit input from populations that usually do not participate in the planning process.

The number of low-income and minority populations for the 32 counties located in southwest Georgia have a 2000 population of 839,393 persons. The primary data source used to identify minority populations was the 2000 U.S. Census of Population and Housing (a.k.a. the 2000 Census), which reports data on race and ethnicity at the county level.

In addition to census data, information from the U.S. Department of Education's National Center for Education Statistics (2005-2006 school year), the Georgia Department of Education (2006-2007 school year), and GreatSchools, Inc. (2005-2006 school year) were reviewed to identify whether they provided more recent or more locally specific information that was useful for identifying minority populations. These additional data sources did provide supplemental information related to the race and ethnicity of students attending public and private elementary and secondary schools in the study area. Also, in rural areas the attendance boundaries of elementary schools are often smaller than a county. Thus, using these additional data sources provided more recent and locally specific information that could be useful for identifying minority and low-income populations.

The primary data source used to identify low-income populations was the 2000 Census. Low income means that total family income or unrelated individual income in 1999 was less than the poverty threshold specified for the applicable family size as determined, and adjusted annually, by the Office of Management and Budget.

In addition the web sites and/or public involvement plans for the three MPOs within the study area were reviewed to collect additional information about traditionally underserved communities – those communities with high concentrations of minority, low-income, elderly or disabled populations – as defined in the Southwest Georgia Interstate Study Public Involvement Plan and required in the USDOT Statewide Transportation Planning; Metropolitan Transportation Planning; Final Rule §450.210, Interested Parties, Public Involvement and Consultation.

The 2000 Census defines “minority” as persons who are:



## Southwest Georgia Interstate Study

### Technical Memorandum

### Socioeconomic & Demographic Data

- Hispanic or Latino,
- American Indian or Alaskan Native alone (not Hispanic or Latino),
- Asian alone (not Hispanic or Latino)
- Native Hawaiian and Other Pacific Islander alone (not Hispanic or Latino),
- Black or African American alone (not Hispanic or Latino),
- Some other race alone, or
- Two or more races.

The minority population concentrations collected for the study area are shown in Table 1.3.1. As this data shows, the study area has a substantially higher concentration of minority populations than the state of Georgia. The concentrations of Latinos for the study area is lower than for the state of Georgia while the study area has a higher concentration of African Americans than the state of Georgia.

**Table 1.3.1**  
**Race and Ethnicity Percentages for the State and Study Area**

<b>Race/Ethnicity</b>	<b>State of Georgia</b>	<b>Study Area Counties</b>
Non-Latino White alone	62.70%	53.30%
Latino (of any race)	5.30%	3.60%
Non-Latino Black or African American alone	28.50%	41.00%
Non-Latino American Indian or Alaskan Native alone	0.20%	0.30%
Non-Latino Asian alone	2.10%	0.80%
Non-Latino Native Hawaiian and Other Pacific Islander alone	0.00%	0.10%
Non-Latino and some other race alone	0.10%	0.10%
Non-Latino and of two or more races	1.10%	0.90%
<b>Minority</b>	<b>0.374</b>	<b>0.467</b>

Source: US Census 2000, SF1 P8/SF3 P7 Hispanic or Latino by Race

Table 1.3.2 lists and Figure 1.3.1 displays the minority populations for each county in the study area. The data shows that percentages of minority populations in individual counties range from 18.4 percent (Lee) to 63.3 percent (Stewart). Of the study area's 32 counties, 14 counties have



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

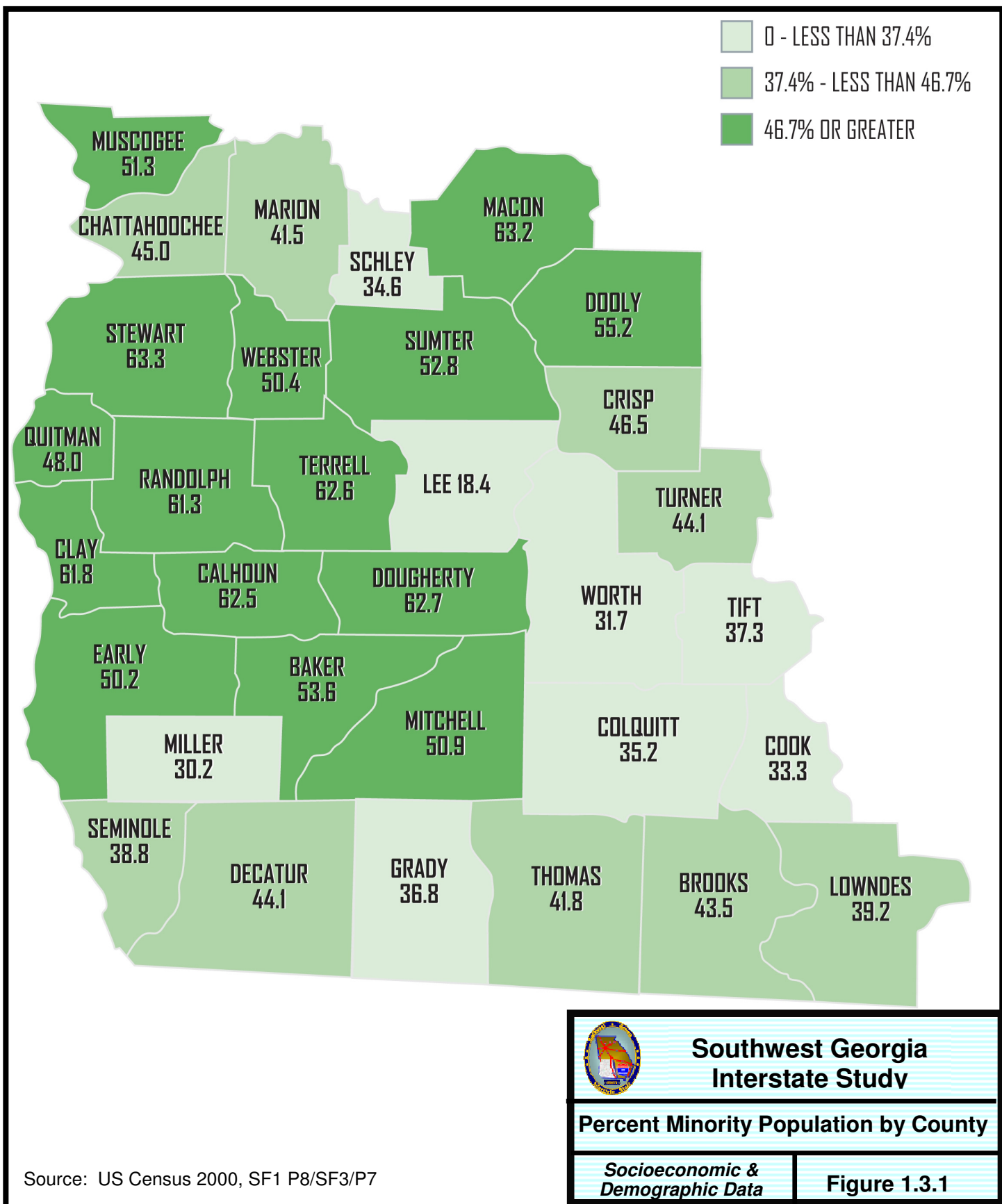
Table 1.3.2  
Minority Populations in Counties in the Study Area  
Compared with the State of Georgia

Area	Population	Minority Population	Percent Minority	Exceeds State Percent (37.4%)	Exceeds Study Area Percent (46.7%)
Baker	4,074	2,185	53.6%	X	X
Brooks	16,450	7,147	43.5%	X	
Calhoun	6,320	3,952	62.5%	X	X
Chattahoochee	14,882	6,701	45.0%	X	
Clay	3,357	2,075	61.8%	X	X
Colquitt	42,053	14,801	35.2%		
Cook	15,771	5,245	33.3%		
Crisp	21,996	10,218	46.5%	X	
Decatur	28,240	12,440	44.1%	X	
Dooly	11,525	6,364	55.2%	X	X
Dougherty	96,065	60,271	62.7%	X	X
Early	12,354	6,195	50.1%	X	X
Grady	23,659	8,705	36.8%		
Lee	24,757	4,554	18.4%		
Lowndes	92,115	36,123	39.2%	X	
Macon	14,074	8,890	63.2%	X	X
Marion	7,144	2,962	41.5%	X	
Miller	6,383	1,927	30.2%		
Mitchell	23,932	12,186	50.9%	X	X
Muscogee	186,291	95,623	51.3%	X	X
Quitman	2,598	1,247	48.0%	X	X
Randolph	7,791	4,775	61.3%	X	X
Schley	3,766	1,304	34.6%		
Seminole	9,369	3,635	38.8%	X	
Stewart	5,252	3,326	63.3%	X	X
Sumter	33,200	17,528	52.8%	X	X
Terrell	10,970	6,869	62.6%	X	X
Thomas	42,737	17,862	41.8%	X	

Sources: 2000 Census SF1 P8/SF3/P7 Hispanic or Latino by Race

Southwest Georgia Interstate Study







## Southwest Georgia Interstate Study

### Technical Memorandum

### Socioeconomic & Demographic Data

populations that are greater than 50.0 percent (i.e., a minority population concentration). In addition, 24 counties have minority population percentages greater than the state of Georgia (37.4 percent), and 15 counties have minority population percentages greater than the study area counties combined (46.7 percent) (i.e., a minority population concentration).

Table 1.3.3 shows the low-income population concentration for the state of Georgia and the study area. The data shows that the study area has a substantially higher concentration of low-income populations than the state of Georgia.

Table 1.3.3  
Low-Income Percentages for the State and Study Area

Low-income	State of Georgia	Study Area Counties
Individuals Below Poverty Level	13.00%	20.10%

Source: US Census 2000, SF3 P87 Poverty Status in 1999 by Age

In addition to the data noted above, the low-income populations of all 32 counties in the study area were reviewed. Table 1.3.4 lists the level of low-income populations in the counties relative to the state of Georgia and the project counties combined. Additionally, this data has been presented in spatial format, by county, in Figure 1.3.2. This figure represents the level of low-income populations in the counties in the study area.

This evaluation revealed that the percentage of low-income individuals in the study area ranged from 8.2 percent (Lee) to 31.3 percent (Clay). Of the study area's 32 counties, 30 counties have low-income population percentages that are greater than the state of Georgia (13.0 percent), and 22 counties have low-income population percentages greater than the Southwest Georgia Interstate study area counties combined (20.1 percent) (i.e., a low-income population concentration).



# Southwest Georgia Interstate Study

## Technical Memorandum

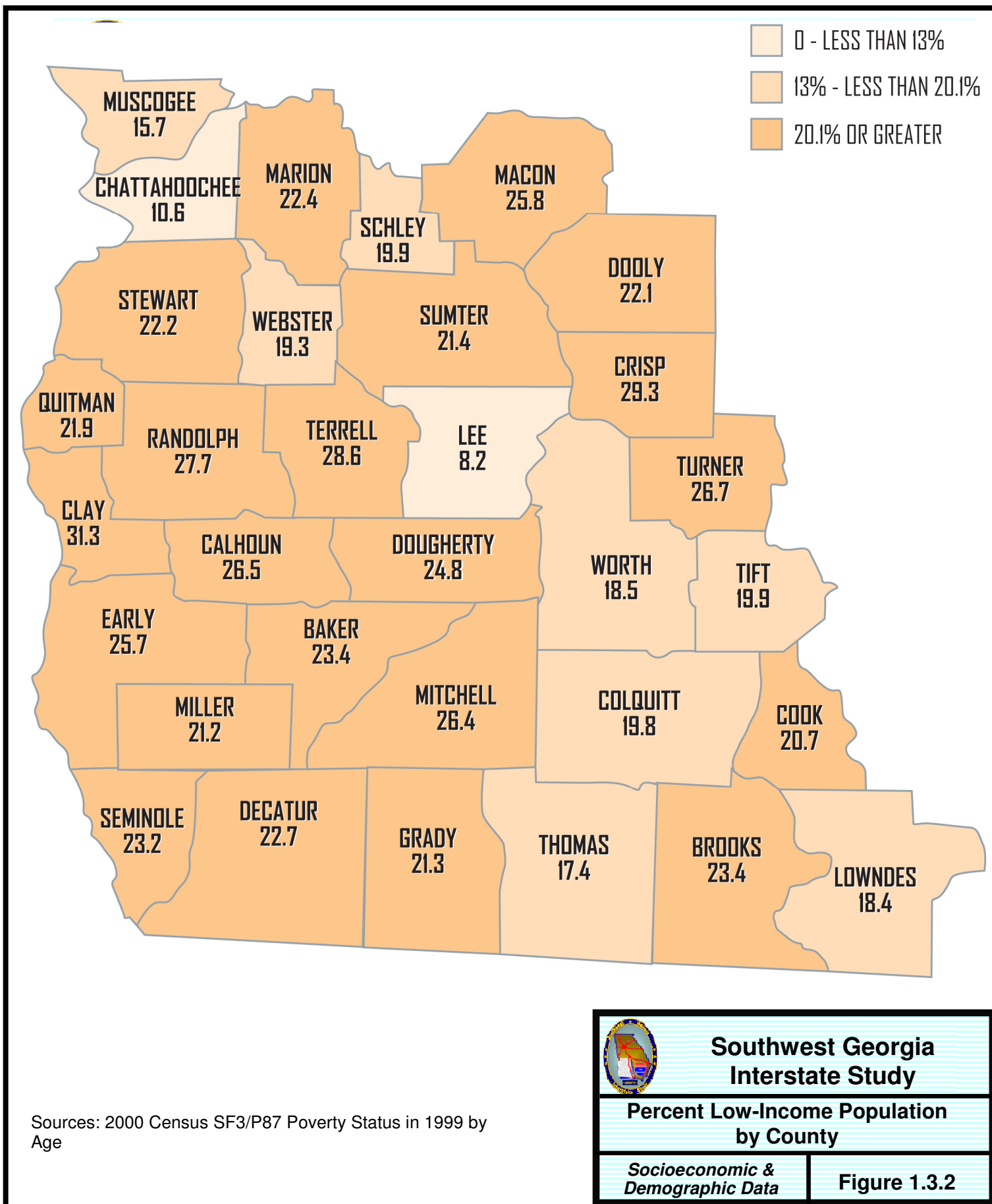
### Socioeconomic & Demographic Data

Table 1.3.4  
Low-Income Population in Counties in Study Area  
Compared with State of Georgia and Study Area

Area	Population	Low-income Population	Percent Low-income	Exceeds State Percent (13.0%)	Exceeds Study Area Percent (18.5)
Baker	4,071	951	23.4%	X	X
Brooks	16,152	3,785	23.4%	X	X
Calhoun	5,011	1,328	26.5%	X	X
Chattahoochee	9,961	1,051	10.6%		
Clay	3,293	1,030	31.3%	X	X
Colquitt	41,396	8,205	19.8%	X	X
Cook	15,555	3,221	20.7%	X	X
Crisp	21,599	6,330	29.3%	X	X
Decatur	27,548	6,240	22.7%	X	X
Dooly	10,202	2,255	22.1%	X	X
Dougherty	92,793	22,974	24.8%	X	X
Early	12,037	3,094	25.7%	X	X
Grady	23,347	4,982	21.3%	X	X
Lee	23,807	1,958	8.2%		
Lowndes	85,144	15,622	18.3%	X	
Macon	13,076	3,377	25.8%	X	X
Marion	7,037	1,578	22.4%	X	X
Miller	6,238	1,322	21.2%	X	X
Mitchell	21,929	5,793	26.4%	X	X
Muscogee	177,184	27,741	15.7%	X	
Quitman	2,594	568	21.9%	X	X
Randolph	7,466	2,070	27.7%	X	X
Schley	3,758	746	19.9%	X	X
Seminole	9,242	2,141	23.2%	X	X
Stewart	4,941	1,097	22.2%	X	X
Sumter	31,702	6,796	21.4%	X	X
Terrell	10,748	3,069	28.6%	X	X
Thomas	41,578	7,231	17.4%	X	
Tift	37,034	7,374	19.9%	X	X
Turner	9,329	2,494	26.7%	X	X
Webster	2,384	459	19.3%	X	X
Worth	21,886	4,050	18.5%	X	X
TOTAL				30	27

Source: 2000 Census

Southwest Georgia Interstate Study





## **Southwest Georgia Interstate Study**

### **Technical Memorandum**

### **Socioeconomic & Demographic Data**

The combined data on minority populations and low-income populations in the study area were then reviewed. By comparing these results relative to the state of Georgia and then with the study area counties combined, counties were identified where minority and low-income population concentrations overlap. Table 1.3.5 shows the results of this analysis.

There were 24 counties that exceeded the minority population average for the state of Georgia (37.4 percent) and 30 counties that exceeded the low-income population average for the state of Georgia (13.0 percent). Only one county (Lee) had neither a minority population percentage nor a low-income percentage that exceeded the state of Georgia averages. Seven counties had low-income concentrations, but do not have minority concentrations, while one county had a minority concentration, but did not have a low-income concentration. Twenty-three of the 32 counties in the study area have both minority and low-income concentrations.

When comparing the minority and low-income populations of the counties in the study area to the study area counties combined, there are 15 counties that exceeded the minority population average for the combined counties (46.7 percent) and 22 counties that exceeded the low-income household average for the combined counties (20.1 percent). Only four counties had neither a minority population percentage nor a low-income percentage that exceeded the percentages of the study area counties combined. Two counties (Muscogee and Webster) had a minority concentration, but do not have low-income concentration, and nine counties do not have minority concentrations, but have low-income concentrations. Thirteen of the 32 counties in the study area have both minority and low-income concentrations.





# Southwest Georgia Interstate Study

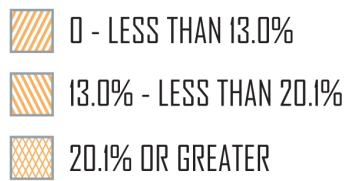
## Technical Memorandum

### Socioeconomic & Demographic Data

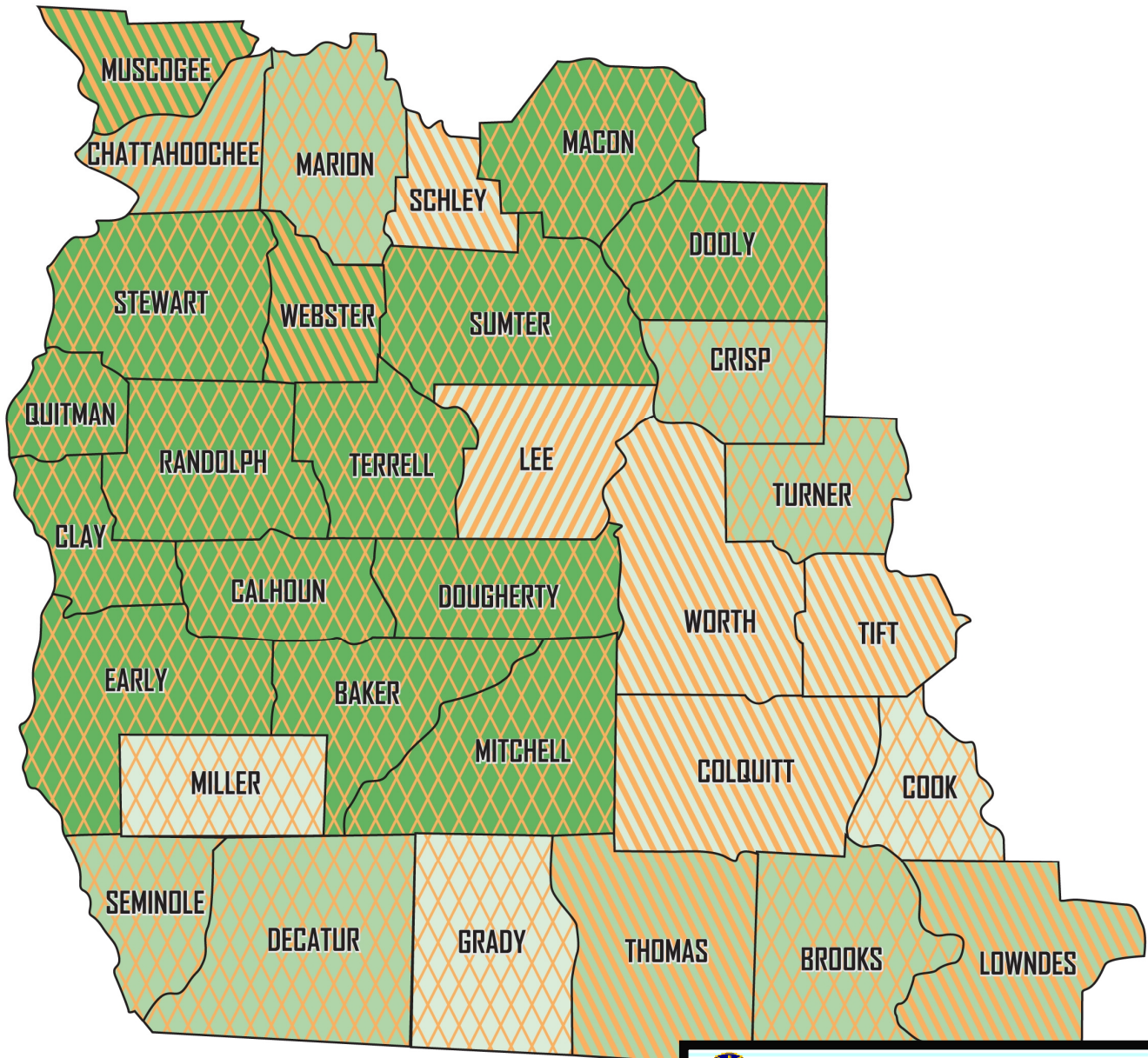
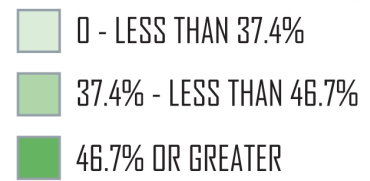
Table 1.3.5  
Combined Data Minority and Low-Income Populations  
By County for the Study Area

Area	Above Georgia Minority Percentage (37.4%)	Above Georgia Low-income Percentage (13.0%)	Above Combined Minority Percentage (46.7%)	Above Combined Low-Income Percentage (20.1%)
Baker	X	X	X	X
Brooks	X	X		X
Calhoun	X	X	X	X
Chattahoochee	X			
Clay	X	X	X	X
Colquitt		X		
Cook		X		X
Crisp	X	X		X
Decatur	X	X		X
Dooly	X	X	X	X
Dougherty	X	X	X	X
Early	X	X	X	X
Grady		X		X
Lee				
Lowndes	X	X		
Macon	X	X	X	X
Marion	X	X		X
Miller		X		X
Mitchell	X	X	X	X
Muscogee	X	X	X	
Quitman	X	X	X	X
Randolph	X	X	X	X
Schley		X		
Seminole	X	X		X
Stewart	X	X	X	X
Sumter	X	X	X	X
Terrell	X	X	X	X
Thomas	X	X		
Tift		X		
Turner	X	X		X
Webster	X	X	X	
Worth		X		
TOTAL	24	30	15	22

### POVERTY



### MINORITY



Sources: 2000 Census SF1 P8/SF3 P7 Hispanic or Latino by Race and SF3 P87 Poverty Status in 1999 by Age



## Southwest Georgia Interstate Study

### Percent Low-Income & Minority Populations by County

Socioeconomic & Demographic Data

Figure 1.3.3



## **Southwest Georgia Interstate Study**

### ***Technical Memorandum***

### ***Socioeconomic & Demographic Data***

A number of additional characteristics for the population of the study area have been examined and are shown in Table 1.3.6 and Figures 1.3.4 – 1.3.10. These figures illustrate the following demographic characteristics for each county in the study area:

- 65 years old and older population – speaks to mobility and ability to get to a meeting, income level, time of day for a meeting, need for large print materials,
- Disabled population – speaks to mobility, ability to get to a meeting, income level, need for large print materials, need for Braille materials, signing for the deaf,
- Educational attainment – speaks to reading, writing, and comprehension ability, and the type of materials and presentations that can be used to convey information,
- Language spoken – speaks to the need for an interpreter and the translation of materials,
- Time leaving home for work – speaks to those who may work second or third shift, or two shifts, and time of a meeting,
- Zero vehicles per occupied unit – speaks to accessibility and mobility, and the location of a meeting, and
- Mobile home units – speaks to income level.

These demographic characteristics are all available from 2000 Census data and represent self reported sample data as factored to the general population by the Census Bureau.



# Southwest Georgia Interstate Study

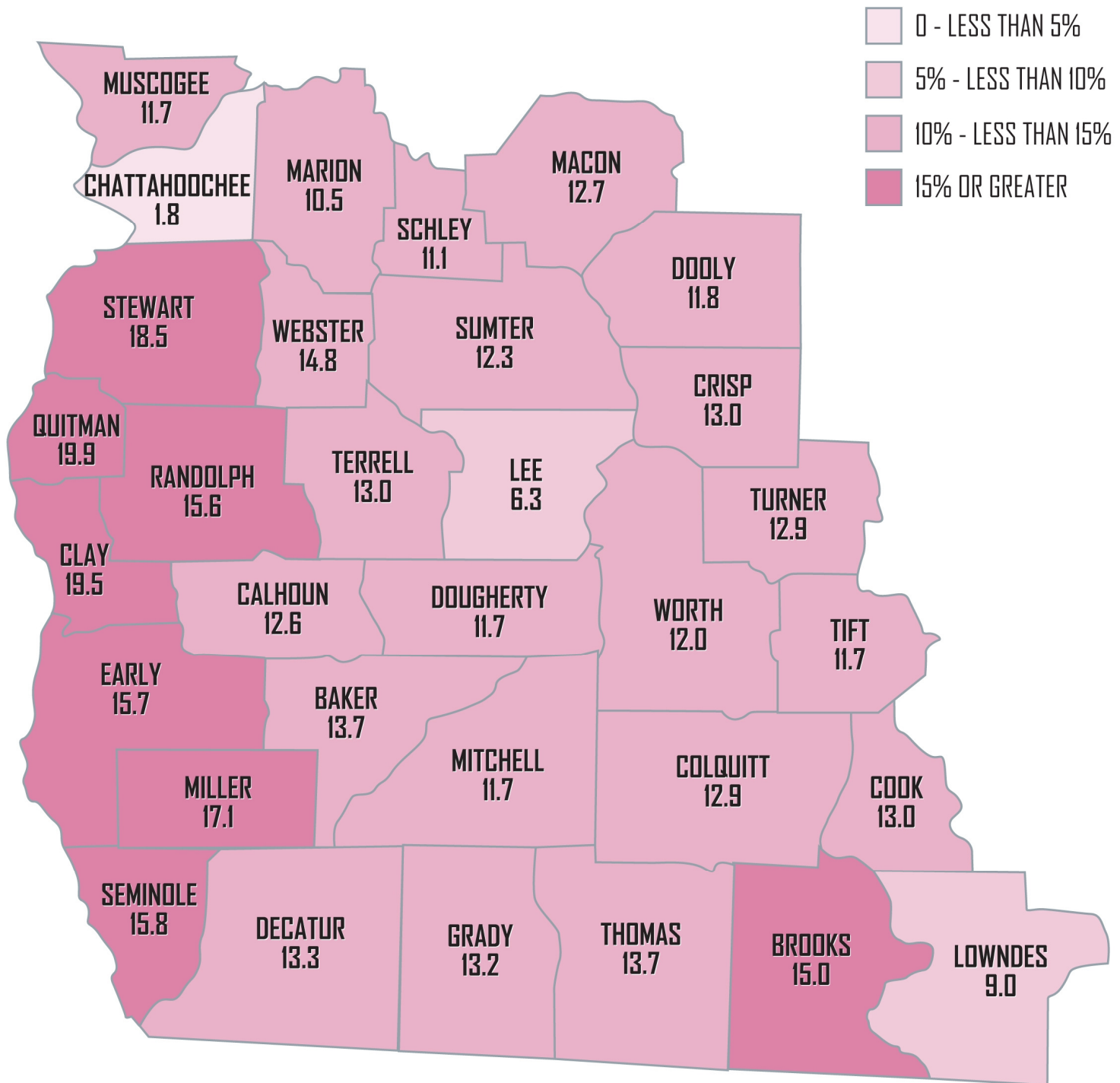
## Technical Memorandum

### Socioeconomic & Demographic Data

Table 1.3.6  
2000 Additional Demographic Data

County	Minority	Low-Income	65 Years Old And Over	Disabled Over 5 Years Old	0 - 12 <sup>th</sup> Grade With No Diploma	English Not Spoken At Home	Time Leaving Home For Work	Occupied Units With No Vehicle	Mobile Home Units
Baker	2,185	951	557	1,760	864	186	1,266	128	718
Brooks	7,147	3,785	2,465	6,942	3,403	528	5,533	539	2,347
Calhoun	3,952	1,328	794	2,363	1,475	126	1,727	316	676
Chattahoochee	6,701	1,051	268	1,706	720	1,936	6,749	131	658
Clay	2,075	1,030	655	1,644	790	58	939	232	814
Colquitt	14,801	8,205	5,405	17,962	9,170	4,215	15,128	1,755	5,079
Cook	5,245	3,221	2,046	6,912	3,501	651	5,140	521	2,309
Crisp	10,218	6,330	2,853	10,304	4,681	923	6,860	1,373	2,046
Decatur	12,440	6,240	3,743	11,329	5,346	1,233	8,804	1,050	2,853
Dooly	6,364	2,255	1,362	4,415	2,305	510	3,301	562	1,309
Dougherty	60,271	22,974	11,208	38,679	15,286	3,906	29,781	4,597	3,194
Early	6,195	3,094	1,945	5,746	2,485	293	3,948	698	1,767
Grady	8,705	4,982	3,128	9,443	4,586	1,161	7,907	820	3,184
Lee	4,554	1,958	1,570	6,442	2,810	764	10,254	306	1,680
Lowndes	36,123	15,622	8,271	28,621	12,119	4,206	31,014	2,641	5,429
Macon	8,890	3,377	1,791	6,054	3,253	577	3,448	833	1,550
Marion	2,962	1,578	752	3,189	1,533	437	2,345	347	1,461
Miller	1,927	1,322	1,092	2,722	1,326	90	2,347	202	678
Mitchell	12,186	5,793	2,810	9,328	5,198	885	7,245	1,082	2,565
Muscogee	95,623	27,741	21,817	68,543	24,044	14,029	62,502	8,154	2,863
Quitman	1,247	568	516	1,397	749	56	735	117	1,013
Randolph	4,775	2,070	1,212	3,409	1,798	246	2,167	565	801
Schley	1,304	746	419	1,502	709	131	1,330	163	650
Seminole	3,635	2,141	1,477	4,404	1,964	437	3,029	418	1,653
Stewart	3,326	1,097	973	2,734	1,287	129	1,512	396	741
Sumter	17,528	6,796	4,095	12,527	6,028	1,656	10,789	1,557	2,784
Terrell	6,869	3,069	1,425	4,979	2,394	367	3,117	674	837
Thomas	17,862	7,231	5,870	18,533	7,329	1,498	14,557	1,787	4,124
Tift	14,315	7,374	4,498	13,921	7,512	3,126	13,117	1,333	4,241
Turner	4,189	2,494	1,230	3,724	1,846	540	3,052	429	1,191
Webster	1,204	459	353	1,031	615	130	836	97	418
Worth	6,968	4,050	2,629	9,268	4,430	377	7,397	849	3,415
Total	391,786	160,932	99,229	321,533	141,556	45,407	277,876	34,672	65,048

Sources: 2000 Census SF1 P1/SF3 P1 Total Population; SF1 P8/SF3 P7 Hispanic or Latino by Race; SF3 P87 Poverty Status in 1999 by Age; SF1 P12/SF3 P8 Sex by Age; SF3 P41 Age by Types of Disability for the Civilian Non-institutionalized Populations 5 Years and over with Disabilities, SF3 P37 Sex by Educational Attainment for the Populations 25 Years and over, SF3 P19 Age by Language Spoken at Home by Ability to Speak English by the Population 5 Years and over, SF3 P34 Time Leaving Home to go to Work for Workers 16 Years and over, SF3 H44 Tenure by Vehicles Available, and SF3 H30 Units in Structure



Sources: 2000 Census SF1 P12/SF3 P8 Sex by Age



## Southwest Georgia Interstate Study

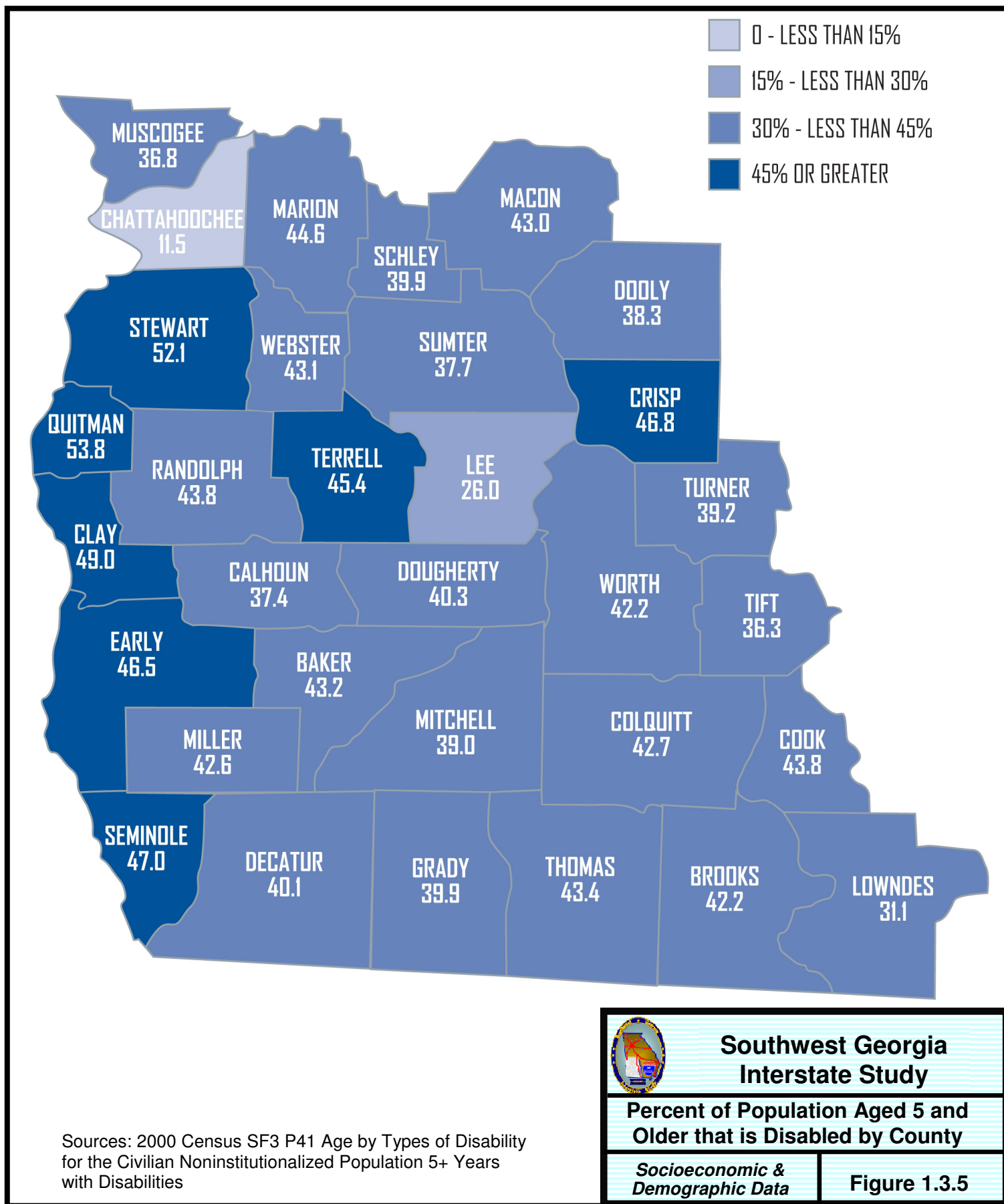
Percent of Population Aged 65  
and Older by County

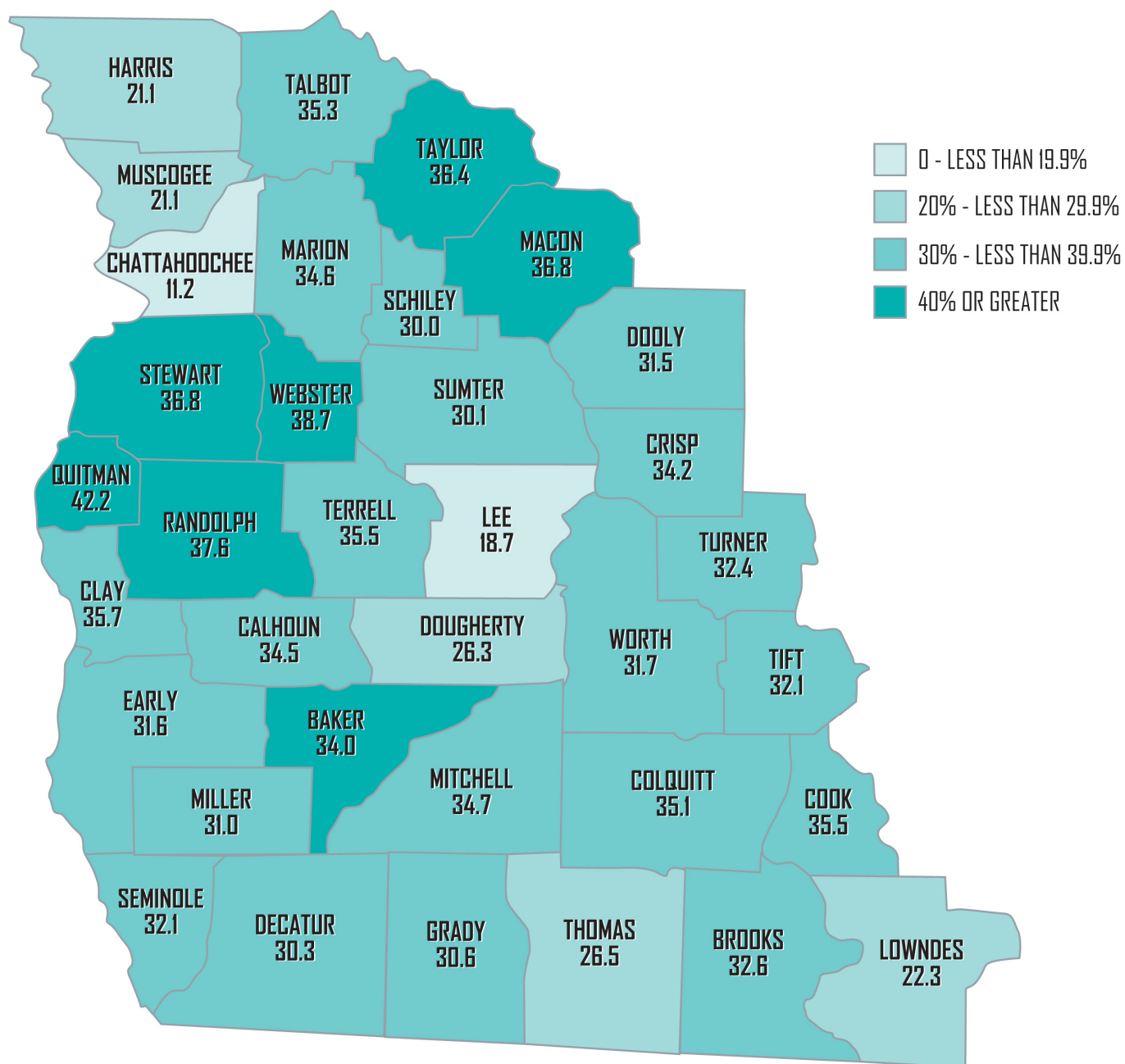
*Socioeconomic &  
Demographic Data*

**Figure 1.3.4**

*Southwest Georgia Interstate Study*







Sources: 2000 Census SF3 P37 Sex by Educational Attainment for the Population 25+ Years

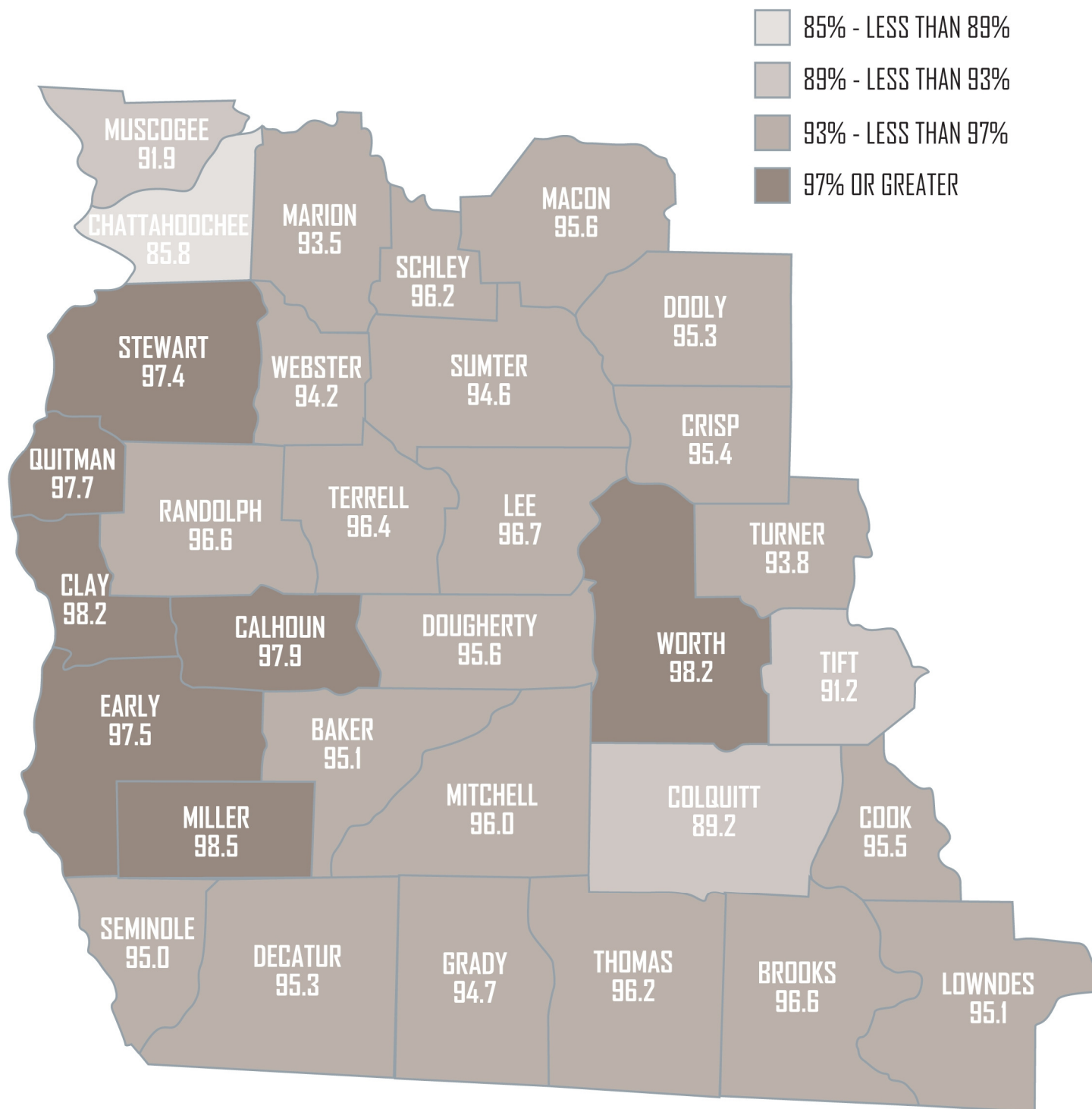


## Southwest Georgia Interstate Study

Percent of Population Aged 25 and Older with No High School Diploma by County

*Socioeconomic & Demographic Data*

**Figure 1.3.6**



Sources: 2000 Census SF3 P19 Age by Language Spoken at Home by Ability to Speak English by the Population 5+ Years

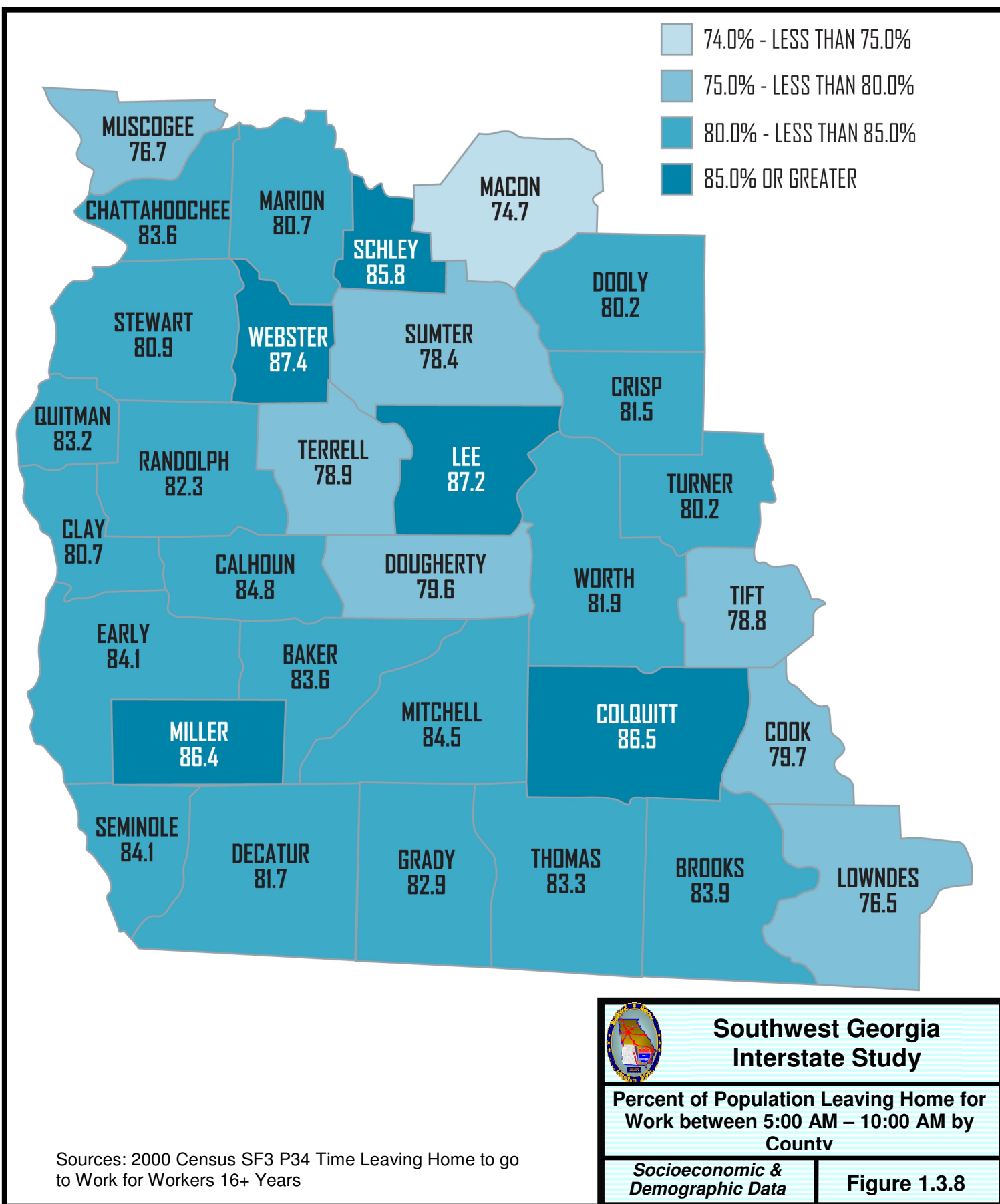


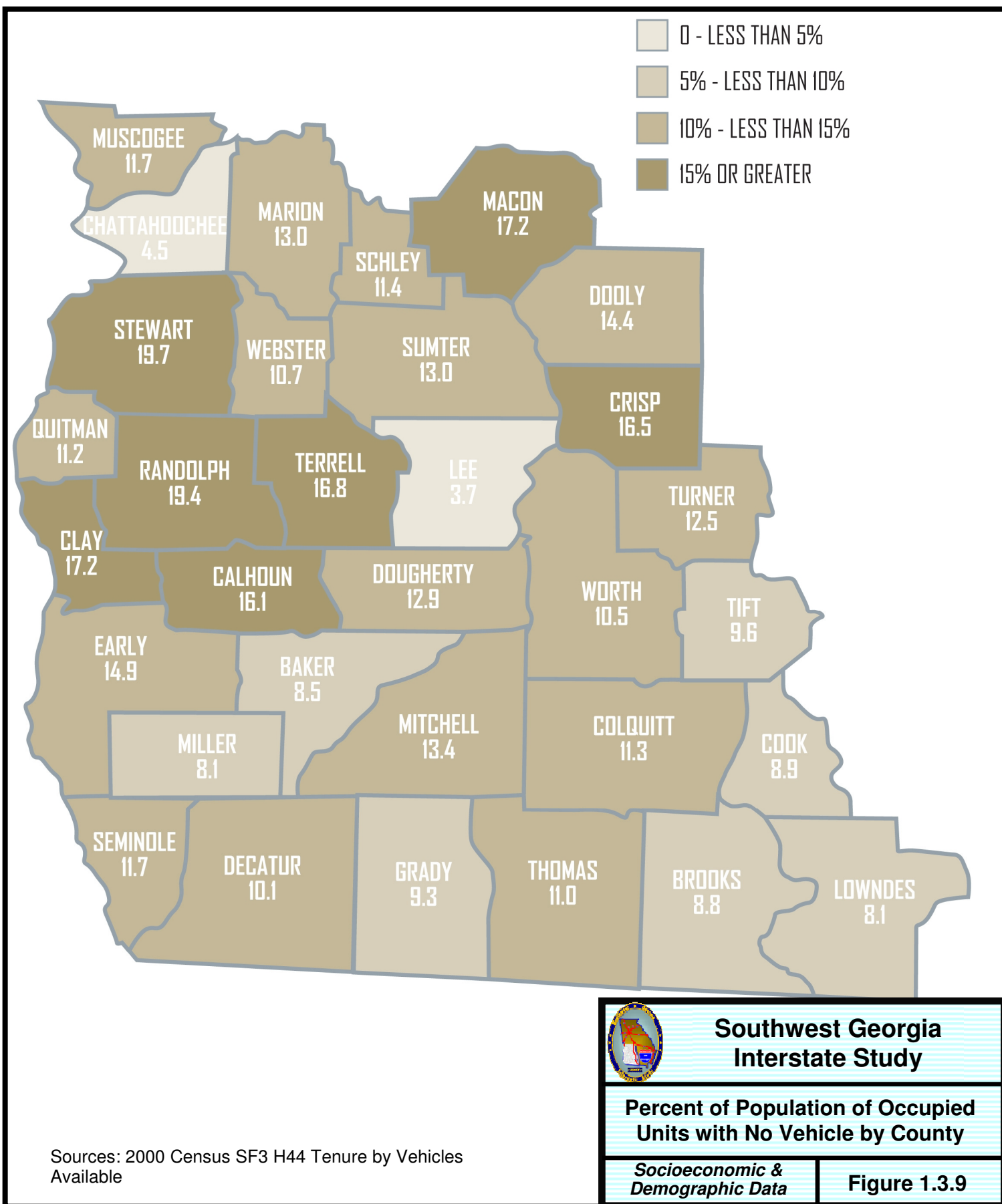
## Southwest Georgia Interstate Study

Percent of Population Aged 5 and Older Speaking English at Home by County

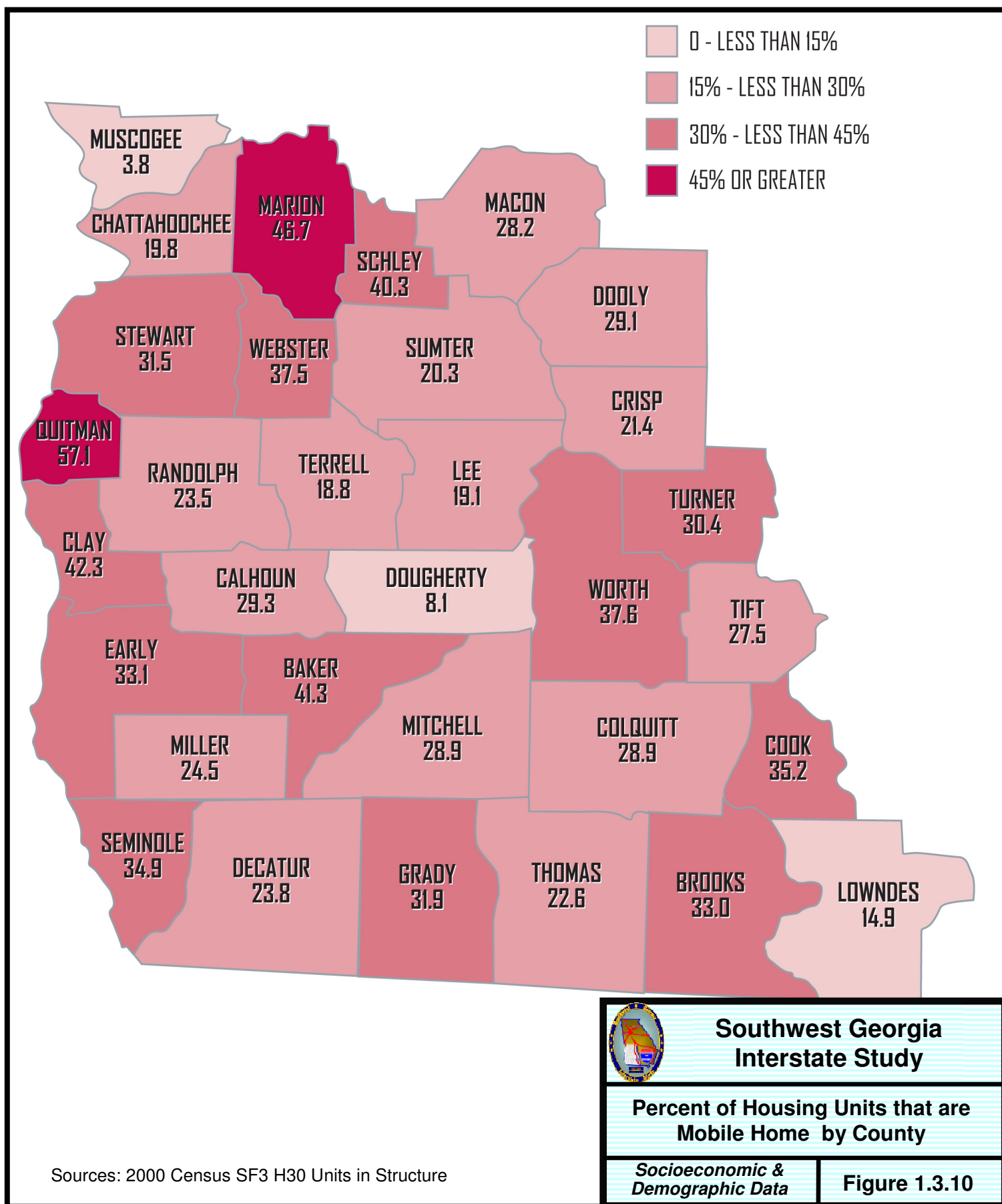
Socioeconomic & Demographic Data

Figure 1.3.7











# **Southwest Georgia Interstate Study**

## **Technical Memorandum**

### **Socioeconomic & Demographic Data**

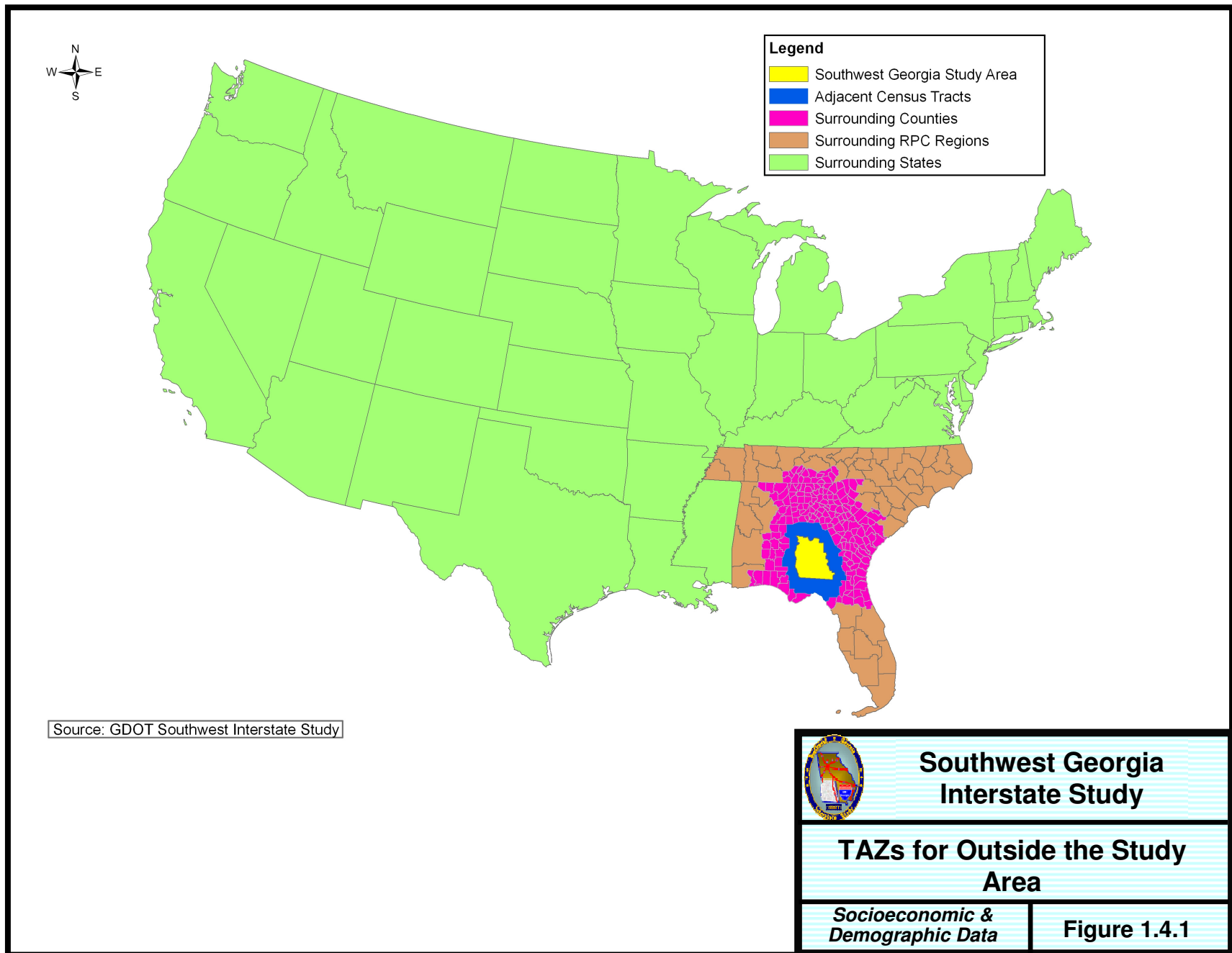
#### **1.4 Areas outside of Study Area**

In addition to the study area, population and employment data was collected for the rest of Georgia and the country since the entire country was included in the travel demand model developed for this study. Since the Southwest Georgia region is the primary focus of the study, TAZs located inside this area are much smaller in size with more detailed data. The TAZs for geographic regions outside the study range from a census tract immediately adjacent to the study area to an entire state further away from the study area. The data collected for the portion of Georgia adjacent to the study area was at census tract level while the rest of Georgia was at the county level. In the surrounding states, data was collected at the census tract level and aggregated to the adjacent MPOs and/or planning districts while the data for the remaining areas was aggregated to state level. State level information was collected for the remaining lower 48 states. The TAZs for outside the study area are shown in Figure 1.4.1. However, in order to seamlessly merge the outer TAZs with the TAZs inside the study area, the total population and employment data for entire nation was used. The development of the TAZ configuration is discussed in the TAZ development section of the Technical Memorandum #5.

The collection of 2006 population and employment data for the entire nation was also necessary for the process to disaggregate the FAF origin-destination freight data into TAZs. The refinement and disaggregation of the FAF to create the truck trip tables is discussed in the truck table development section in the model development document.

##### **1.4.1 Population**

The Population data for the area outside the study area was collected from the US Census 2006 estimates. Since some of the TAZs outside the Southwest Georgia Study area may be in larger geographic areas which might include one or multiple counties or even the entire State, 2006 population estimates by State as well as by Counties were collected. Household numbers are usually correlated to the population. The number of households is an indicator of the population. As part of the data collection, the estimates of households for States as well as for Counties were also collected. Census data was used to populate the TAZs outside the study area, since the census geographic features are the basis on which the TAZ system was built. For TAZs that use Census tract, County, or States as boundary, the population data was immediately populated into the TAZ. For, TAZs that belong to Regional Planning Regions, the counties inside each planning region were identified, and the records from the Census 2006 population were aggregated to sum up the total for the TAZ. Population density for each TAZ is calculated by the normalizing the total TAZ population with TAZ area.





# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

Table 1.4.1.1  
2006 State Population and Household Data

FIPS	STATE	POPULATION	HOUSEHOLDS
23	Maine	1,321,574	691,132
24	Maryland	5,615,727	2,300,567
25	Massachusetts	6,437,193	2,708,986
26	Michigan	10,095,643	4,513,726
27	Minnesota	5,167,101	2,283,453
28	Mississippi	2,910,540	1,241,489
29	Missouri	5,842,713	2,623,094
30	Montana	944,632	432,023
31	Nebraska	1,768,331	774,843
32	Nevada	2,495,529	1,065,197
33	New Hampshire	1,314,895	589,812
34	New Jersey	8,724,560	3,472,643
35	New Mexico	1,954,599	850,095
36	New York	19,306,183	7,907,420
37	North Carolina	8,856,505	4,028,959
38	North Dakota	635,867	307,802
39	Ohio	11,478,006	5,044,709
40	Oklahoma	3,579,212	1,607,349
41	Oregon	3,700,758	1,586,498
42	Pennsylvania	12,440,621	5,453,228
44	Rhode Island	1,067,610	449,582
45	South Carolina	4,321,249	1,975,638
46	South Dakota	781,919	352,813
47	Tennessee	6,038,803	2,681,150
48	Texas	23,507,783	9,224,361
49	Utah	2,550,063	901,283
50	Vermont	623,908	309,557
51	Virginia	7,642,884	3,230,803
53	Washington	6,395,798	2,699,333
54	West Virginia	1,818,470	877,784
55	Wisconsin	5,556,506	2,534,075
56	Wyoming	515,004	239,178
72	Puerto Rico	3,927,776	
1	Alabama	4,599,030	2,110,154
2	Alaska	670,053	276,571
4	Arizona	6,166,318	2,605,283
5	Arkansas	2,810,872	1,273,615
6	California	36,457,549	13,174,378
8	Colorado	4,753,377	2,094,898
9	Connecticut	3,504,809	1,432,241
10	Delaware	853,476	382,828
11	District of Columbia	581,530	282,894
12	Florida	18,089,888	8,533,419
13	Georgia	9,363,941	3,873,183
15	Hawaii	1,285,498	500,036
16	Idaho	1,466,465	615,624
17	Illinois	12,831,970	5,199,589
18	Indiana	6,313,520	2,756,331
19	Iowa	2,982,085	1,320,331
20	Kansas	2,764,075	1,207,987
21	Kentucky	4,206,074	1,888,164
22	Louisiana	4,287,768	1,830,073

Source: US Department of Commerce, Census Bureau

Southwest Georgia Interstate Study



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

Table 1.4.1.2  
2006 County Population and Household Sample Data

FIPS	COUNTY	STATE	POPULATION	HOUSEHOLDS
1001	Autauga County	Alabama	49,730	19,533
1003	Baldwin County	Alabama	169,162	96,390
1005	Barbour County	Alabama	28,171	12,789
1007	Bibb County	Alabama	21,482	8,589
1009	Blount County	Alabama	56,436	21,724
1011	Bullock County	Alabama	10,906	4,786
1013	Butler County	Alabama	20,520	10,316
1015	Calhoun County	Alabama	112,903	53,091
1017	Chambers County	Alabama	35,176	16,460
1019	Cherokee County	Alabama	24,863	14,492
1021	Chilton County	Alabama	41,953	18,478
1023	Choctaw County	Alabama	14,656	8,038
1025	Clarke County	Alabama	27,248	12,952
1027	Clay County	Alabama	13,829	6,783
1029	Cleburne County	Alabama	14,700	6,401
1031	Coffee County	Alabama	46,027	21,438
1033	Colbert County	Alabama	54,766	26,039
1035	Conecuh County	Alabama	13,403	7,415
1037	Coosa County	Alabama	11,044	6,329
1039	Covington County	Alabama	37,234	18,948
1041	Crenshaw County	Alabama	13,719	6,833
1043	Cullman County	Alabama	80,187	36,366

FIPS = Federal Information Processing Standards Code  
Source: US Department of Commerce, Census Bureau

#### 1.4.2 Employment

In a similar fashion, the 2006 Employment data for the entire TAZ system was collected. The 2006 employment estimates for the outer region was collected from the Bureau of Economic Analysis (BEA). BEA is an agency of the Department of Commerce. Along with the Census Bureau and STAT-USA, BEA is part of the Department's Economics and Statistics Administration. BEA collects source data, conducts research and analysis, develops and implements estimation methodologies, and disseminates statistics to the public. BEA's estimates of state and local area employment consist of the number of wage and salary jobs, sole proprietorships, and general partners. Table CA25 – total employment by industry was used. The location of the table on the website is listed below:

<http://www.bea.gov/regional/reis/default.cfm?&catable=CA25&series=SIC>





## **Southwest Georgia Interstate Study**

# **Technical Memorandum**

# **Socioeconomic & Demographic Data**

The BEA employment estimates measure the number of jobs. Employment can be measured either as a count of workers or as a count of jobs. In the former case, an employed worker is counted only once; in the latter case, all jobs held by the worker are counted. The county employment estimates are a count of the number of jobs, so that, as with the earnings estimates, a worker's activity in each industry and location of employment is reflected in the measure.

Like the Census data, the BEA data provides the employment estimates at both the state and county levels for 2006. However, the data is not available at census tract level. The BEA data provides the employment data by 114 industries, and for 3,111 counties in the US. Unlike the TAZs inside the Southwest Georgia study area where each TAZ contains employment data by type as well as the total, TAZs in the outer region only need the total employment. Allocation of the employment data to the outer region TAZs was performed identical to the allocation of the population data. For TAZs that are states or counties, the numbers from BEA data are directly used. For TAZs that are adjacent state Regional Planning areas, the county data was aggregated to create the total sum for each planning area. However, for TAZs that are census tracts immediately surrounding the Southwest study area, county total employment was further disaggregated to census tract level. This disaggregation was originally performed according to the area share of each census tract within the county it belongs to. This method of disaggregating employment using the area of each zone produced undesirable results (putting very large employment values in rural zones surrounding the larger cities). The disaggregation method was revised to use the inverse of the area of each zone instead. This has the affect of allocating the employment to the smaller zones, which tend to be the more urbanized zones with increased employment intensity. Figures 1.4.2.1 and 1.4.2.2 shows the employment density by TAZ using both methods.



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

Table 1.4.2.1  
2006 State Employment Data

FIPS	Area Name	2006 Total Employment	FIPS	Area Name	2006 Total Employment
0	United States	178,332,900	29	Missouri	3,671,337
1	Alabama	2,590,042	30	Montana	637,401
2	Alaska	443,335	31	Nebraska	1,240,199
4	Arizona	3,366,201	32	Nevada	1,611,936
5	Arkansas	1,601,339	33	New Hampshire	861,053
6	California	20,525,491	34	New Jersey	5,114,577
8	Colorado	3,175,268	35	New Mexico	1,099,401
9	Connecticut	2,236,062	36	New York	10,952,095
10	Delaware	543,093	37	North Carolina	5,317,153
11	District of Columbia	806,855	38	North Dakota	485,172
12	Florida	10,521,966	39	Ohio	6,893,151
13	Georgia	5,381,295	40	Oklahoma	2,144,708
15	Hawaii	864,393	41	Oregon	2,304,410
16	Idaho	915,021	42	Pennsylvania	7,295,987
17	Illinois	7,601,747	44	Rhode Island	619,991
18	Indiana	3,744,661	45	South Carolina	2,441,522
19	Iowa	2,027,293	46	South Dakota	555,921
20	Kansas	1,844,852	47	Tennessee	3,724,901
21	Kentucky	2,432,901	48	Texas	13,514,130
22	Louisiana	2,439,028	49	Utah	1,591,476
23	Maine	844,635	50	Vermont	434,333
24	Maryland	3,413,120	51	Virginia	4,859,015
25	Massachusetts	4,216,027	53	Washington	3,868,813
26	Michigan	5,542,222	54	West Virginia	927,285
27	Minnesota	3,571,011	55	Wisconsin	3,611,453
28	Mississippi	1,531,373	56	Wyoming	376,249

FIPS = Federal Information Processing Standards Code  
Source: US Department of Commerce, Census Bureau



# Southwest Georgia Interstate Study

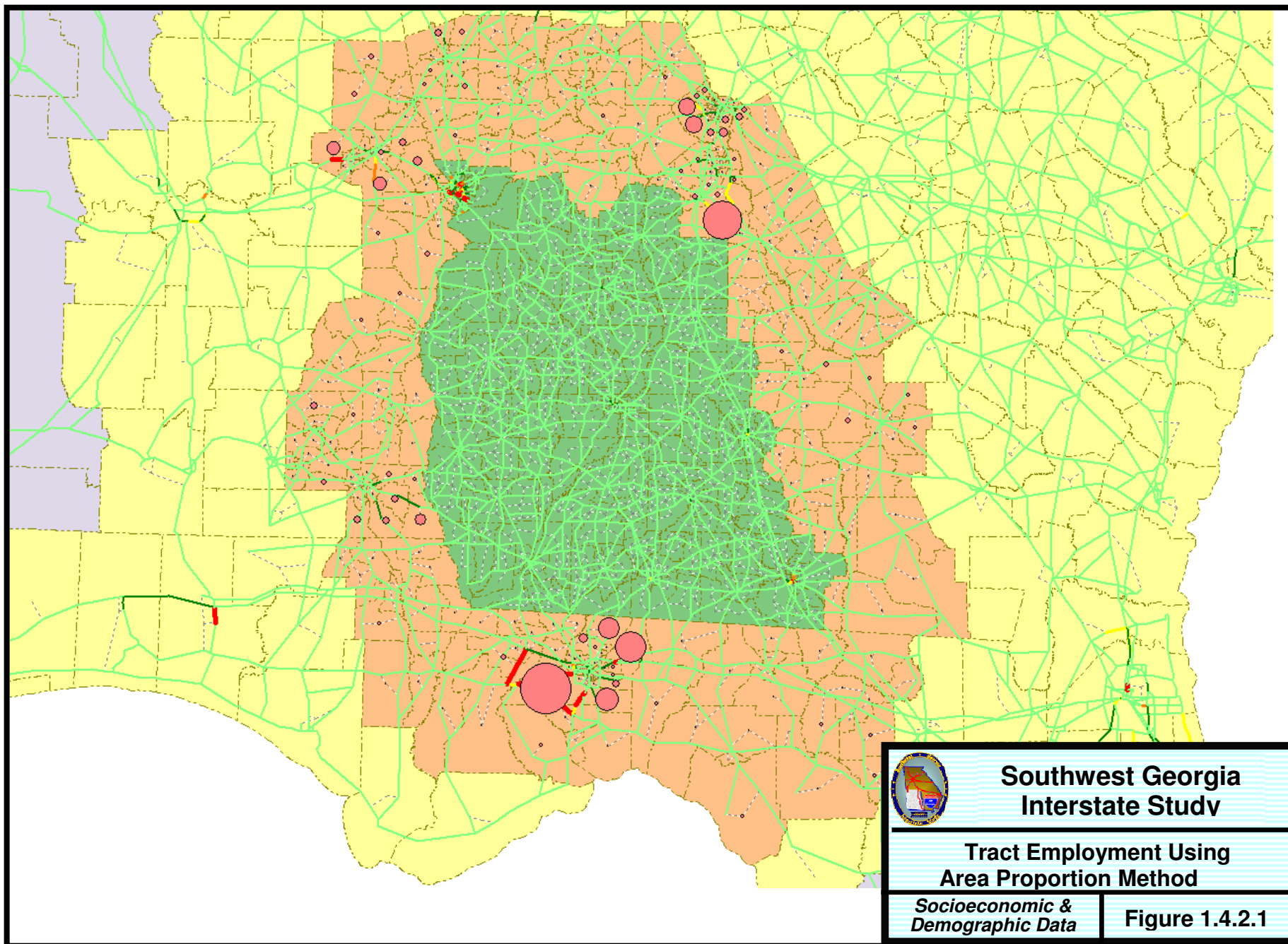
## Technical Memorandum

### Socioeconomic & Demographic Data

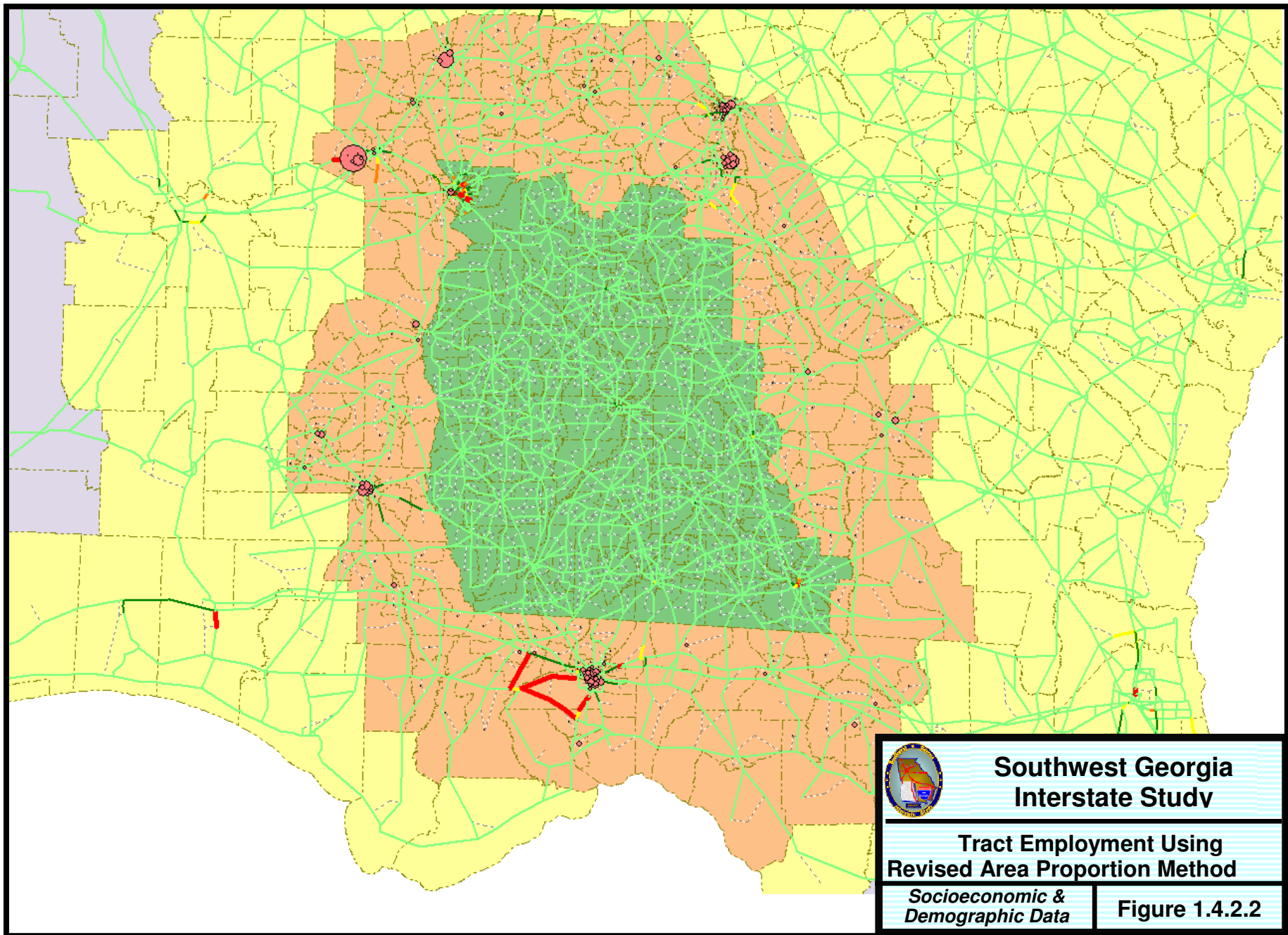
Table 1.4.2.2  
2006 County Employment  
Sample Data

FIPS	County	State	2006 Total Employment
1001	Autauga	AL	18,670
1003	Baldwin	AL	88,090
1005	Barbour	AL	14,703
1007	Bibb	AL	6,605
1009	Blount	AL	19,056
1011	Bullock	AL	4,463
1013	Butler	AL	10,100
1015	Calhoun	AL	65,735
1017	Chambers	AL	14,854
1019	Cherokee	AL	8,853
1021	Chilton	AL	13,581
1023	Choctaw	AL	5,740
1025	Clarke	AL	13,087
1027	Clay	AL	7,244
1029	Cleburne	AL	4,980
1031	Coffee	AL	22,682
1033	Colbert	AL	29,614
1035	Conecuh	AL	6,054
1037	Coosa	AL	2,599
1039	Covington	AL	19,511
1041	Crenshaw	AL	6,396
1043	Cullman	AL	43,358
1045	Dale	AL	28,328

FIPS = Federal Information Processing Standards Code  
Source: US Department of Commerce, Census Bureau



*Southwest Georgia Interstate Study*



*Southwest Georgia Interstate Study*





# **Southwest Georgia Interstate Study**

## **Technical Memorandum**

### **Socioeconomic & Demographic Data**

## **2.0 Future Year (2040) Socioeconomic and Demographic Data**

### **2.1 Purpose**

The purpose of developing the future year SE data for the model is to be able to use the model to evaluate the transportation system under future condition. The future year SE data were developed from the base year data discussed in previous section as well as the historical trend data collected. The forecasted future year SE data will be used to assist with the application of the travel demand model. The key data for the model are population and employment. The future forecast of the SE data was performed over the entire continent United States with the emphasis placed on the study area.

### **2.2 Future Year Population and Households Forecast**

The future year SE data for population and households was developed from the existing series of the historical data published by the U.S. Census. The U.S. Census provides state population projection up to year 2030 and county level historical population from 1960 to 2006. Therefore, the 2040 data for population at state level as well as at county level can be forecasted based on the available historical trends. Since the U.S. Census's the state population projection for 2030 is relatively close to the forecasted year of 2040, the forecasted state total is considered more accurate than the state total that is summarized from the forecasted county population, which is forecasted using historical trend from 1960 to 2006. Table 2.2.1 shows the state population projection by U.S Census and the forecasted 2040 state population. The annual growth rate calculated for each state between 2000 and 2040 is close to the Census projected annual growth rate observed between the 2000 and 2030. The population growth trends for the six southeastern states and the study area are shown in the Figures 2.2.1 to 2.2.7. These figures also show the forecasted 2040 population and the R-Squared value which is a statistical measure of how well a regression line approximates real data points. An R-squared of 1.0 (100%) indicates a perfect fit.



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

Table 2.2.1  
State Population Forecast for 2040

State Abbreviation	Census 2000	Census Projection 2010	Census Projection 2020	Census Projection 2030	Forecast 2040	Census Annual Growth Rate (2000 - 2030)	Forecasted Annual Growth Rate (2000 - 2040)
US	281,421,906	308,935,581	335,804,546	363,584,435	391,833,137	0.90%	0.80%
AL	4,447,100	4,596,330	4,728,915	4,874,243	5,022,591	0.30%	0.30%
AK	626,932	694,109	774,421	867,674	961,525	1.10%	1.10%
AZ	5,130,632	6,637,381	8,456,448	10,712,397	13,067,702	2.50%	2.40%
AR	2,673,400	2,875,039	3,060,219	3,240,208	3,418,981	0.60%	0.60%
CA	33,871,648	38,067,134	42,206,743	46,444,861	50,720,560	1.10%	1.00%
CO	4,301,261	4,831,554	5,278,867	5,792,357	6,329,233	1.00%	1.00%
CT	3,405,565	3,577,490	3,675,650	3,688,630	3,684,799	0.30%	0.20%
DE	783,600	884,342	963,209	1,012,658	1,056,825	0.90%	0.80%
DC	572,059	529,785	480,540	433,414	389,739	-0.90%	-1.00%
FL	15,982,378	19,251,691	23,406,525	28,685,769	34,216,772	2.00%	1.90%
GA	8,186,453	9,589,080	10,843,753	12,017,838	13,177,835	1.30%	1.20%
HI	1,211,537	1,340,674	1,412,373	1,466,046	1,520,688	0.60%	0.60%
ID	1,293,953	1,517,291	1,741,333	1,969,624	2,202,956	1.40%	1.30%
IL	12,419,293	12,916,894	13,236,720	13,432,892	13,617,799	0.30%	0.20%
IN	6,080,485	6,392,139	6,627,008	6,810,108	6,987,687	0.40%	0.30%
IA	2,926,324	3,009,907	3,020,496	2,955,172	2,879,384	0.00%	0.00%
KS	2,688,418	2,805,470	2,890,566	2,940,084	2,982,635	0.30%	0.30%
KY	4,041,769	4,265,117	4,424,431	4,554,998	4,685,346	0.40%	0.40%
LA	4,468,976	4,612,679	4,719,160	4,802,633	4,883,656	0.20%	0.20%
ME	1,274,923	1,357,134	1,408,665	1,411,097	1,404,852	0.30%	0.20%
MD	5,296,486	5,904,970	6,497,626	7,022,251	7,540,428	0.90%	0.90%
MA	6,349,097	6,649,441	6,855,546	7,012,009	7,159,313	0.30%	0.30%
MI	9,938,444	10,428,683	10,695,993	10,694,172	10,655,786	0.20%	0.20%
MN	4,919,479	5,420,636	5,900,769	6,306,130	6,700,640	0.80%	0.80%
MS	2,844,658	2,971,412	3,044,812	3,092,410	3,138,451	0.30%	0.20%
MO	5,595,211	5,922,078	6,199,882	6,430,173	6,659,242	0.50%	0.40%
MT	902,195	968,598	1,022,735	1,044,898	1,060,245	0.50%	0.40%
NE	1,711,263	1,768,997	1,802,678	1,820,247	1,835,371	0.20%	0.20%



# Southwest Georgia Interstate Study

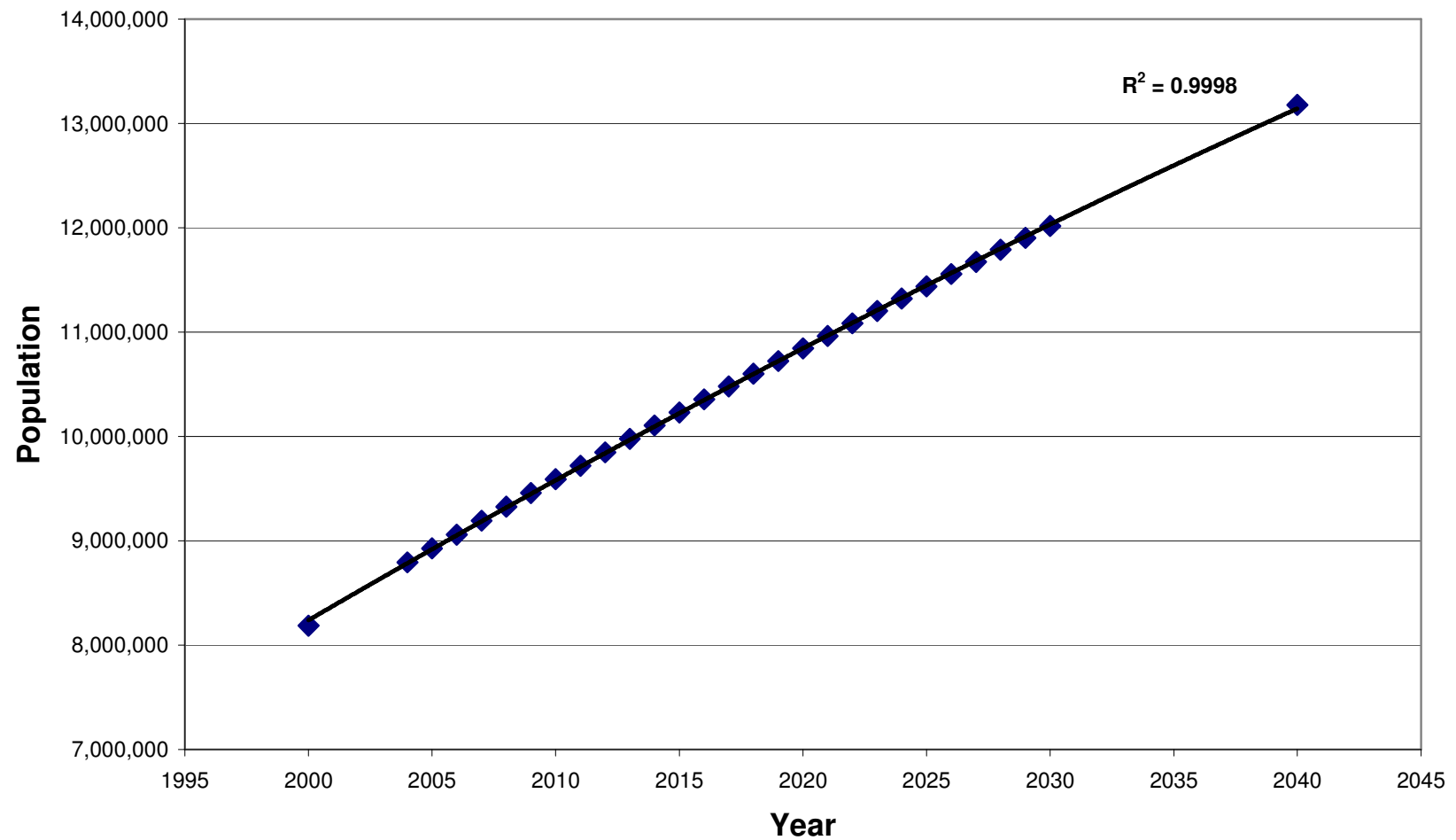
## Technical Memorandum

### Socioeconomic & Demographic Data

State Abbreviation	Census 2000	Census Projection 2010	Census Projection 2020	Census Projection 2030	Forecast 2040	Census Annual Growth Rate (2000 - 2030)	Forecasted Annual Growth Rate (2000 - 2040)
NV	1,998,257	2,690,531	3,452,283	4,282,102	5,119,496	2.60%	2.40%
NH	1,235,786	1,385,560	1,524,751	1,646,471	1,766,434	1.00%	0.90%
NJ	8,414,350	9,018,231	9,461,635	9,802,440	10,134,065	0.50%	0.50%
NM	1,819,046	1,980,225	2,084,341	2,099,708	2,088,343	0.50%	0.30%
NY	18,976,457	19,443,672	19,576,920	19,477,429	19,352,014	0.10%	0.00%
NC	8,049,313	9,345,823	10,709,289	12,227,739	13,782,508	1.40%	1.40%
ND	642,200	636,623	630,112	606,566	578,473	-0.20%	-0.30%
OH	11,353,140	11,576,181	11,644,058	11,550,528	11,439,825	0.10%	0.00%
OK	3,450,654	3,591,516	3,735,690	3,913,251	4,097,899	0.40%	0.40%
OR	3,421,399	3,790,996	4,260,393	4,833,918	5,428,079	1.20%	1.20%
PA	12,281,054	12,584,487	12,787,354	12,768,184	12,703,236	0.10%	0.10%
RI	1,048,319	1,116,652	1,154,230	1,152,941	1,143,556	0.30%	0.20%
SC	4,012,012	4,446,704	4,822,577	5,148,569	5,466,978	0.80%	0.80%
SD	754,844	786,399	801,939	800,462	797,661	0.20%	0.10%
TN	5,689,283	6,230,852	6,780,670	7,380,634	7,994,792	0.90%	0.90%
TX	20,851,820	24,648,888	28,634,896	33,317,744	38,207,779	1.60%	1.50%
UT	2,233,169	2,595,013	2,990,094	3,485,367	4,003,823	1.50%	1.50%
VT	608,827	652,512	690,686	711,867	729,116	0.50%	0.50%
VA	7,078,515	8,010,245	8,917,395	9,825,019	10,744,539	1.10%	1.00%
WA	5,894,121	6,541,963	7,432,136	8,624,801	9,878,638	1.30%	1.30%
WV	1,808,344	1,829,141	1,801,112	1,719,959	1,627,695	-0.20%	-0.30%
WI	5,363,675	5,727,426	6,004,954	6,150,764	6,276,005	0.50%	0.40%
WY	493,782	519,886	530,948	522,979	511,146	0.20%	0.10%

Source: US Census Bureau

# Population Trend (Georgia)



**Southwest Georgia  
Interstate Study**

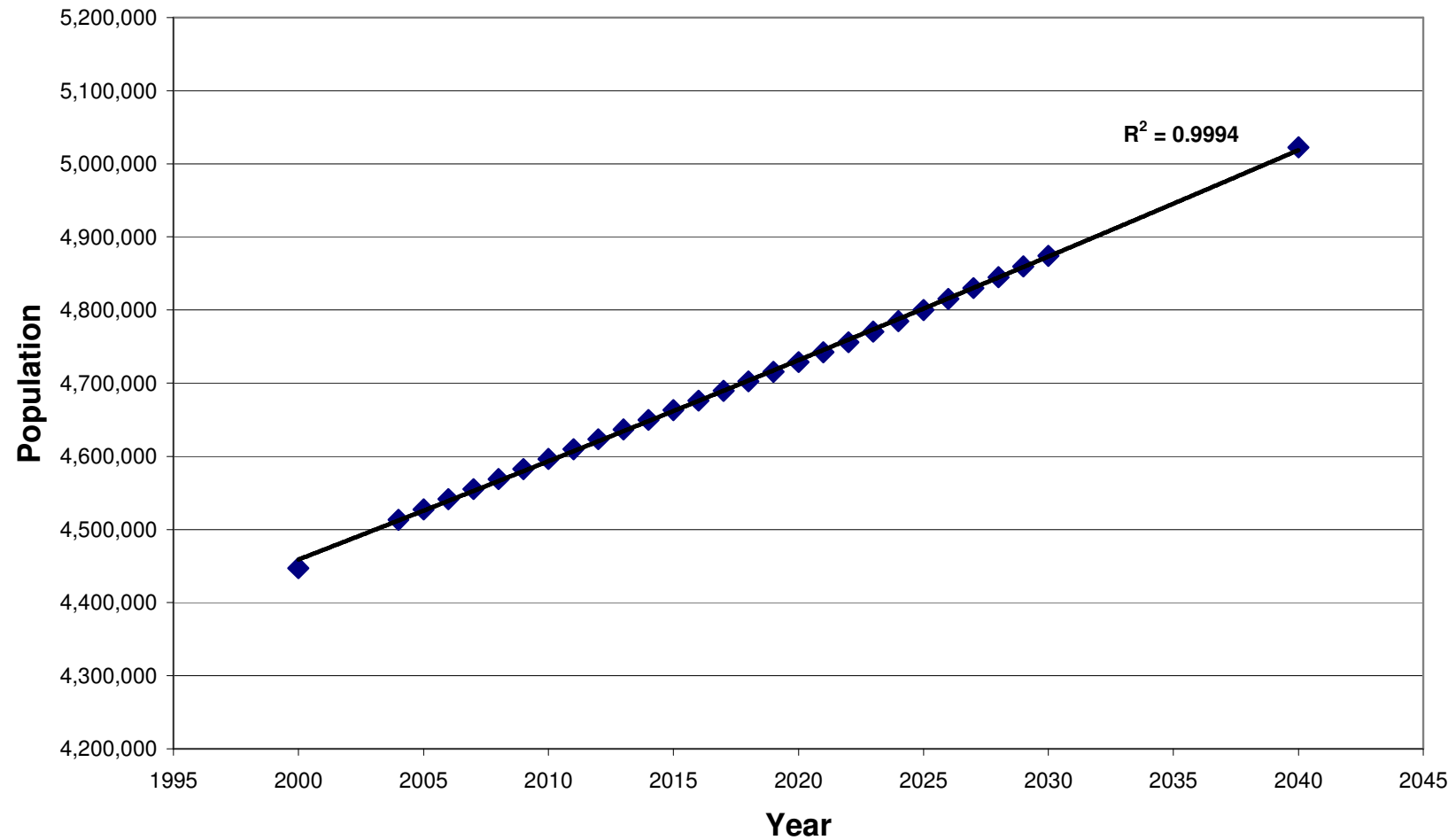
**Future Population**


*Socioeconomic &  
Demographic Data*

**Figure 2.2.1**

*Southwest Georgia Interstate Study*

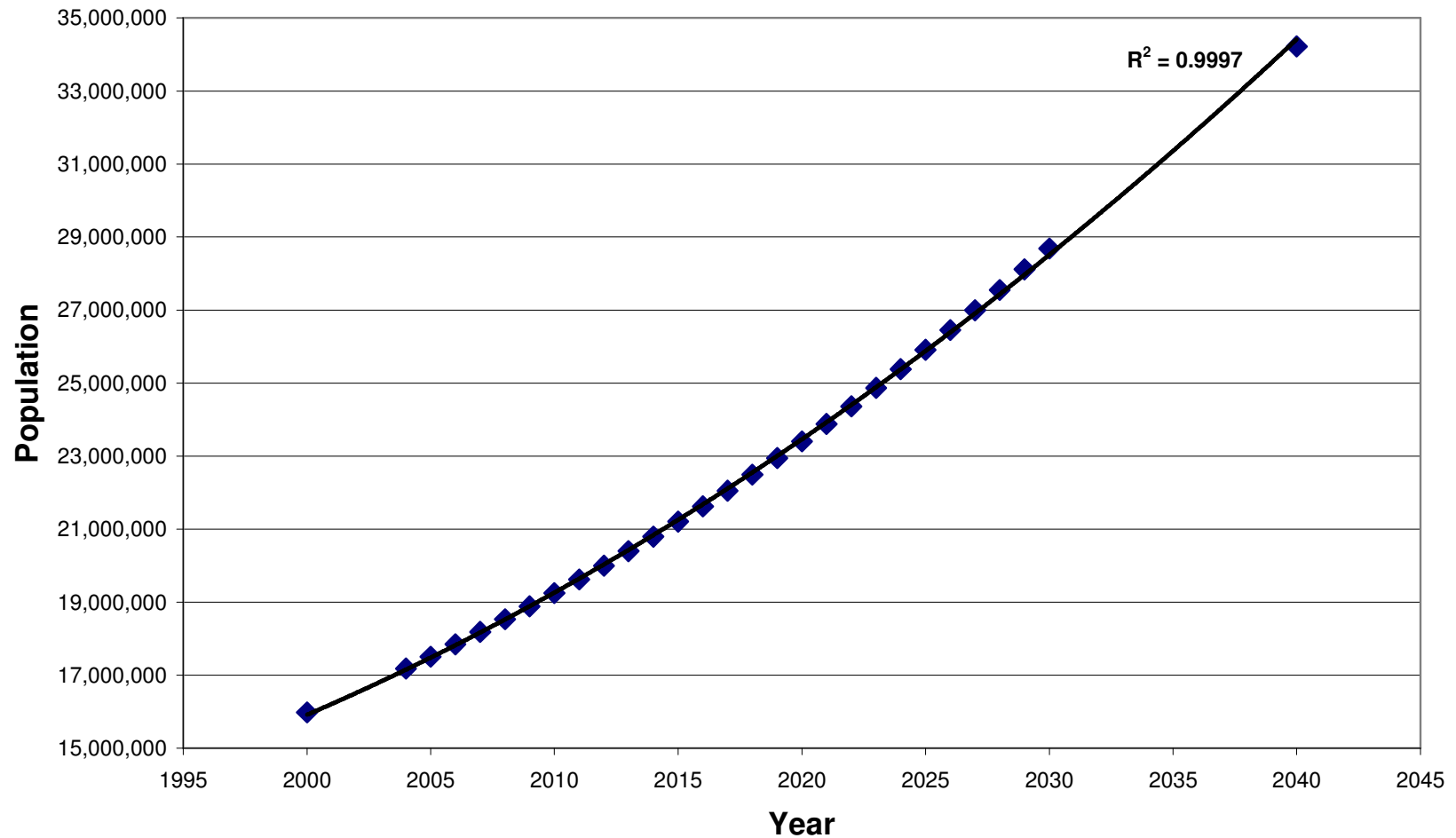
# Population Trend (Alabama)




	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Population</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.2.2</b>



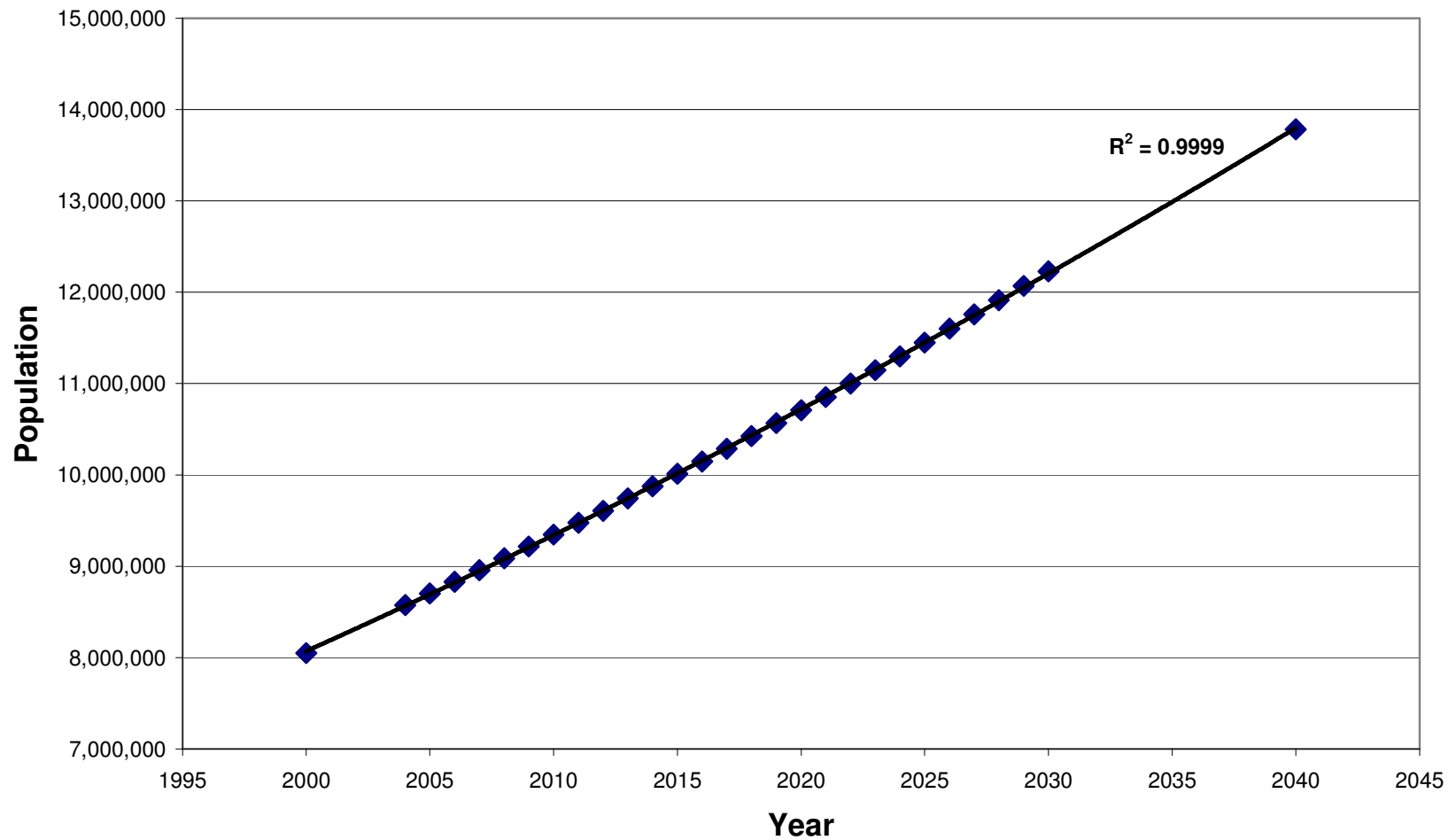
# Population Trend (Florida)




	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Population</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.2.3</b>

*Southwest Georgia Interstate Study*

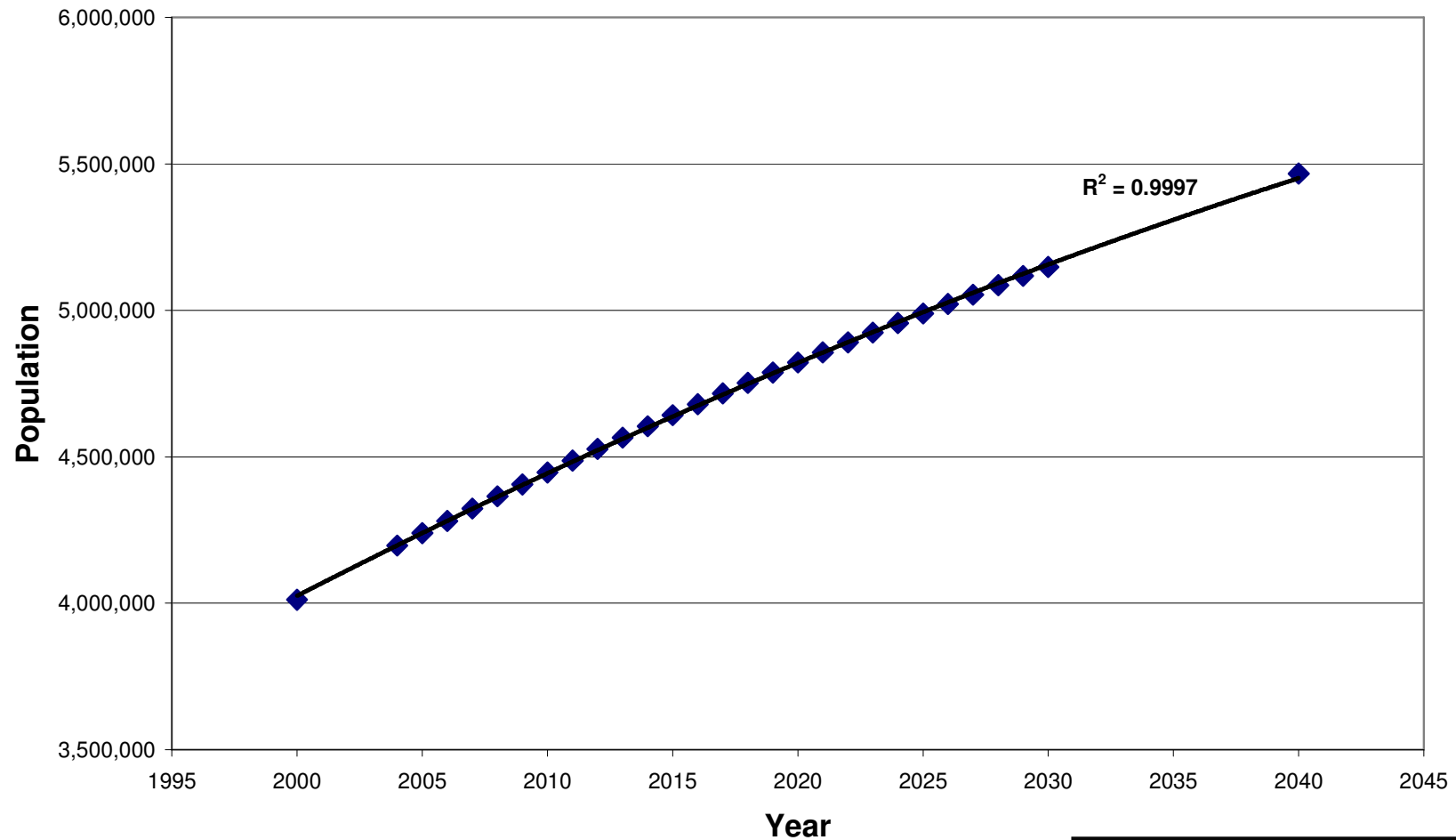
# Population Trend (North Carolina)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Population</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.2.4</b>

*Southwest Georgia Interstate Study*

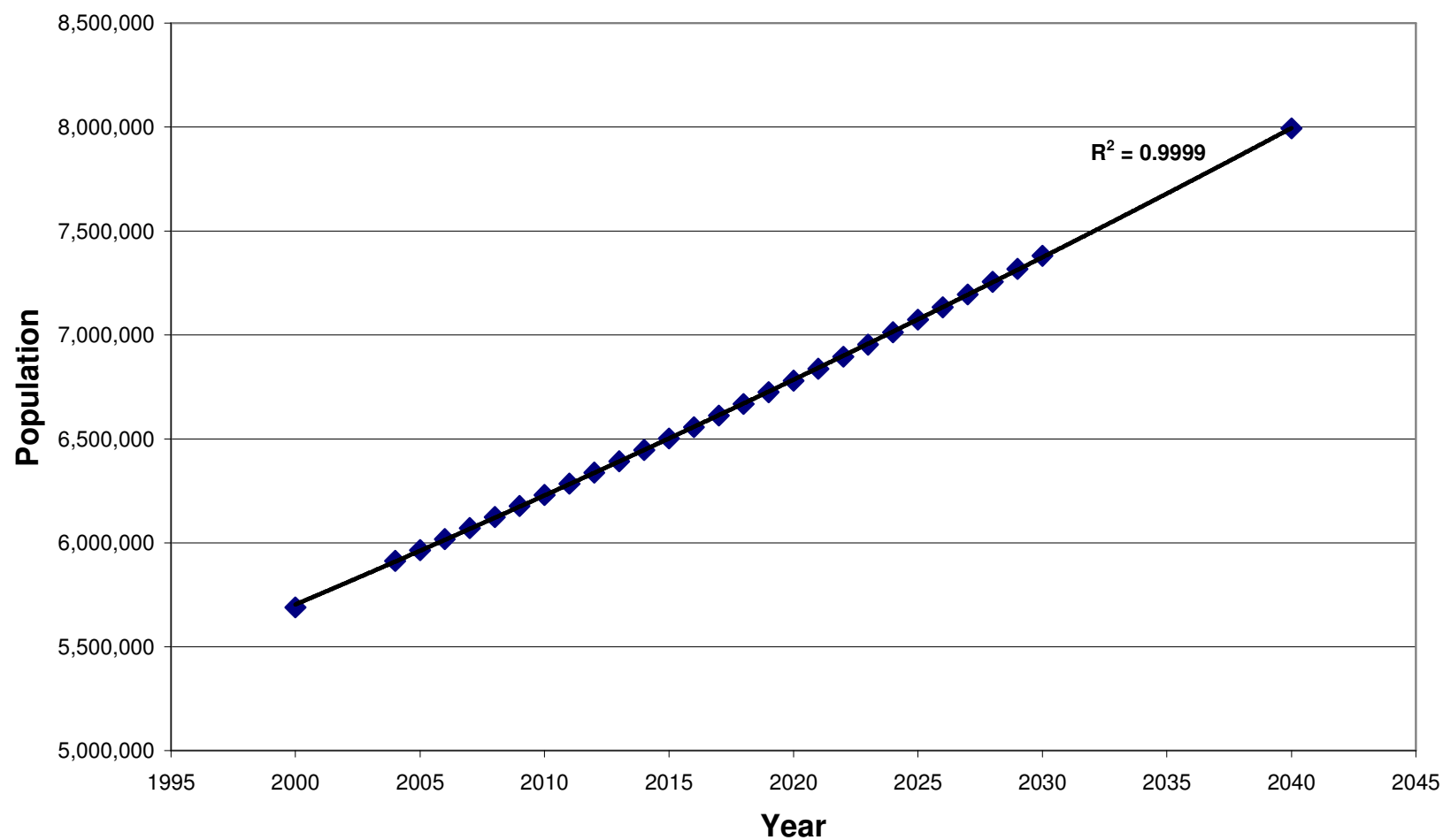
# Population Trend (South Carolina)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Population</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.2.5</b>

*Southwest Georgia Interstate Study*

# Population Trend (Tennessee)



**Southwest Georgia  
Interstate Study**

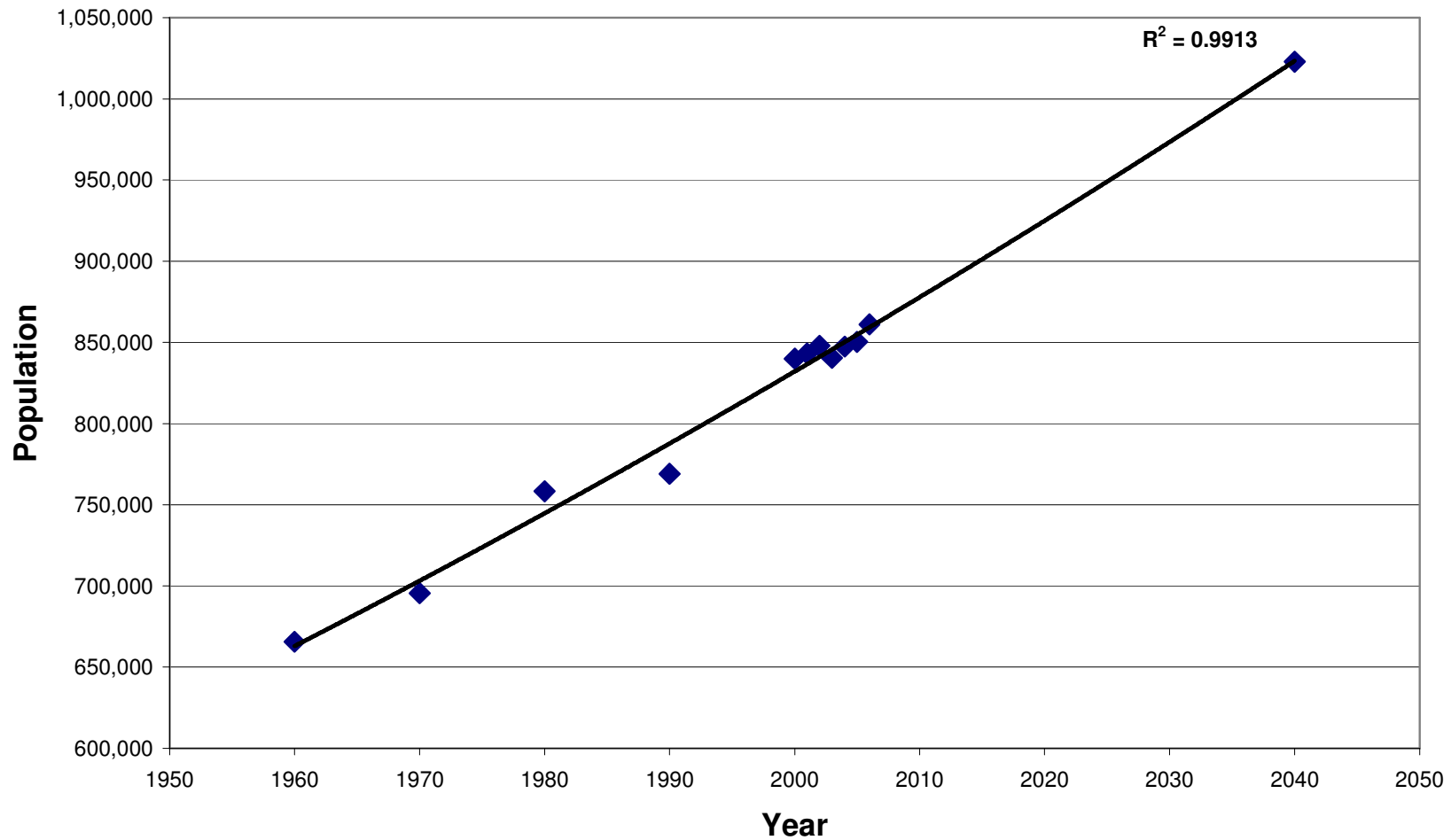
**Future Population**


*Socioeconomic &  
Demographic Data*

**Figure 2.2.6**

*Southwest Georgia Interstate Study*

# Population Trend (Study Area)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Population</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.2.7</b>





# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

In addition to the state projection for 2040, the forecasted population for the counties within the six (6) southeastern states was summed accordingly, and the summarized total was compared with that from state projection. As expected, the two state totals do not exactly match each other up. Since state population for the future year (2040) was forecasted based on the U.S. Census projection (2000 ~ 2030), it is considered more reliable than the state total summarized from individual county forecasts. Therefore, the total for each county within a state was adjusted to match the projected total of each state. Table 2.2.2 shows the population comparison between the projected state total and forecasted state total summarized from counties. The adjustment factors calculated were applied to the population of each county. Final reasonable checks were conducted on the forecasted county total population, especially the counties within and the study area. Table 2.2.3 shows the forecasted population for the 32 counties within the study area. The census forecasted annual average growth rate between 1990 and 2006 was compared with that between 1990 and the forecast year 2040. The growth rate for the study area is 0.6% annually compared with the 0.7% obtained from the census data.

**Table 2.2.2**  
**County Population Adjustment Factors**

State	2040 State Projection	2040 County Total	Adjustment Factors
AL	5,022,591	5,599,514	0.90
FL	34,216,772	27,884,218	1.23
GA	13,177,835	13,209,307	1.00
NC	13,782,508	11,970,353	1.15
SC	5,466,978	5,761,687	0.95
TN	7,994,792	7,869,103	1.02

**Table 2.2.3**  
**County Population Forecast for 2040 within the Study Area**

County	Census 1990	Census 2000	Census 2006	Forecasted 2040	Census Annual Growth Rate (1990-2006)	Forecasted Annual Growth Rate (1990-2040)
Baker	3,615	4,053	4,101	4,307	0.80%	0.40%
Brooks	15,398	16,477	16,461	19,036	0.40%	0.40%
Calhoun	5,013	6,323	6,095	5,613	1.20%	0.20%
Chattahoochee	16,934	14,991	14,042	10,800	-1.20%	-0.90%
Clay	3,364	3,357	3,180	2,750	-0.40%	-0.40%



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

County	Census 1990	Census 2000	Census 2006	Forecasted 2040	Census Annual Growth Rate (1990-2006)	Forecasted Annual Growth Rate (1990-2040)
Colquitt	36,645	42,128	44,821	56,740	1.30%	0.90%
Cook	13,456	15,837	16,332	20,305	1.20%	0.80%
Crisp	20,011	21,988	22,054	25,795	0.60%	0.50%
Decatur	25,511	28,242	28,664	34,668	0.70%	0.60%
Dooly	9,901	11,501	11,747	13,019	1.10%	0.50%
Dougherty	96,311	95,912	94,776	99,624	-0.10%	0.10%
Early	11,854	12,346	12,065	11,482	0.10%	-0.10%
Grady	20,279	23,660	25,083	31,938	1.30%	0.90%
Lee	16,250	24,893	32,492	56,532	4.40%	2.50%
Lowndes	75,981	92,117	97,843	138,202	1.60%	1.20%
Macon	13,114	14,065	13,817	12,437	0.30%	-0.10%
Marion	5,590	7,185	7,276	9,071	1.70%	1.00%
Miller	6,280	6,384	6,239	6,088	0.00%	-0.10%
Mitchell	20,275	23,970	23,852	28,478	1.00%	0.70%
Muscogee	179,278	186,428	188,661	208,758	0.30%	0.30%
Quitman	2,209	2,606	2,486	2,774	0.70%	0.50%
Randolph	8,023	7,758	7,356	6,055	-0.50%	-0.60%
Schley	3,588	3,784	4,196	5,240	1.00%	0.80%
Seminole	9,010	9,372	9,167	11,161	0.10%	0.40%
Stewart	5,654	5,246	4,755	3,096	-1.10%	-1.20%
Sumter	30,228	33,244	32,490	37,737	0.50%	0.40%
Terrell	10,653	10,974	10,654	9,940	0.00%	-0.10%
Thomas	38,986	42,843	45,136	55,163	0.90%	0.70%
Tift	34,998	38,437	41,686	55,285	1.10%	0.90%
Turner	8,703	9,513	9,322	9,826	0.40%	0.20%
Webster	2,263	2,383	2,252	2,147	0.00%	-0.10%
Worth	19,745	21,966	21,941	28,707	0.70%	0.80%
<b>Grand Total</b>	<b>769,120</b>	<b>839,983</b>	<b>861,042</b>	<b>1,022,774</b>	<b>0.70%</b>	<b>0.60%</b>

Source: US Census Bureau

Since the TAZs system for the travel demand model was developed in such a way that several different geographic buffer layers was designated to accommodate different sizes of TAZs, the allocation of the future state and county population data to TAZs was performed depending on where the TAZs are located. For example, TAZs located outside the six (6) southeastern states are represented by individual states. The projected state population therefore was directly allocated to those zones. The total population for each RPC region TAZ was calculated by summarizing the population of all counties located within each RPC. For TAZs as counties, the county forecasted

*Southwest Georgia Interstate Study*



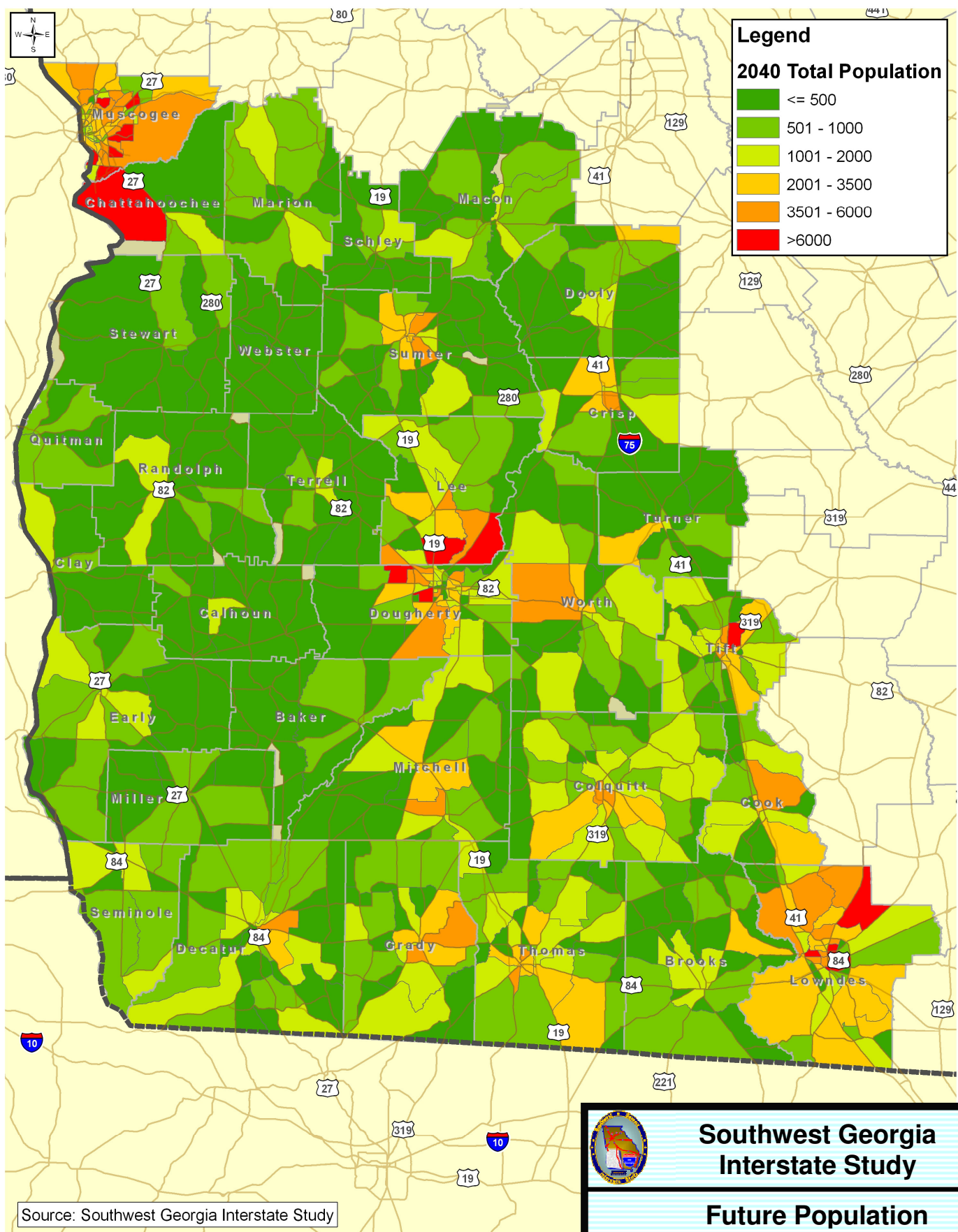
## **Southwest Georgia Interstate Study**

### ***Technical Memorandum***

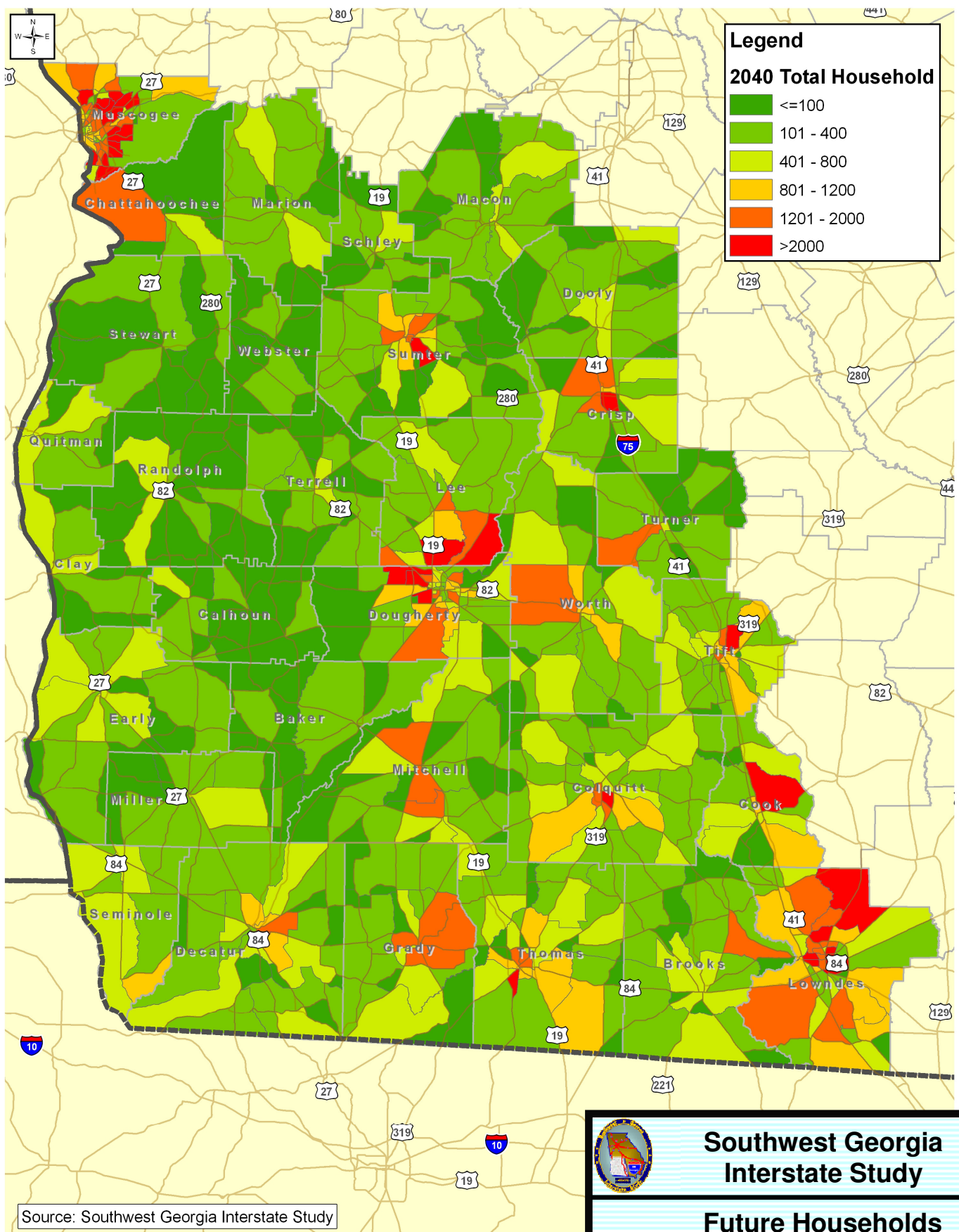
### ***Socioeconomic & Demographic Data***

population was directly allocated. Finally, for TAZs at sub-county level, the base year distribution pattern of population within a county was applied onto the forecasted county population to calculate the future zonal population. The 2040 population in the study area is shown in the figure 2.2.8.

The state household projection is not available from the U.S. Census as those of state population. Since households have a close correlation to the population, it was decided that the base year household to population ratio at zonal level will be applied on the future year population to estimate the future zonal households. The resulting household in the study area is shown in figure 2.2.9.











# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

#### 2.3 Future Year (2040) Employment Forecast

The future zonal employment was developed in a similar fashion to the population. The data sources for the forecast task were GADOL (Georgia Department of Labor) for counties within the study area and the BEA for states and counties outside the study area. The historical trend of employment from 1990 to 2006 was used to forecast the 2040 employment. Table 2.3.1 shows the forecasted state employment and the annual growth rate for the forecasted period. The employment forecast for counties within the study area is shown in Table 2.3.2. Figures 2.3.1 to 2.3.7 show the forecasted trend line and the R-Squared values for the six southeastern states as well as the counties within the study area.

**Table 2.3.1**  
**State Employment Forecast for 2040**

State Abbreviation	BEA 1990	BEA 1995	BEA 2000	BEA 2006	BEA 2040	BEA Annual Growth Rate (1990~2006)	Forecasted Annual Growth Rate (1990~2040)
AL	2,061,101	2,256,073	2,416,422	2,590,042	3,574,523	1.40%	1.10%
AZ	1,909,879	2,275,033	2,819,302	3,366,201	6,434,529	3.60%	2.50%
AK	1,211,177	1,390,772	1,503,867	1,601,339	2,368,123	1.80%	1.40%
CA	16,965,207	17,058,764	19,626,033	20,525,491	29,949,388	1.20%	1.10%
CO	2,054,265	2,441,399	2,949,831	3,175,268	5,663,987	2.80%	2.00%
CT	2,018,357	1,957,936	2,113,957	2,236,062	2,813,125	0.60%	0.70%
DE	422,940	445,378	507,820	543,093	830,268	1.60%	1.40%
DC	788,475	739,642	756,979	806,855	839,039	0.10%	0.10%
FL	6,800,161	7,554,305	8,933,114	10,521,966	18,490,844	2.80%	2.00%
GA	3,689,354	4,215,080	4,892,294	5,381,295	9,137,261	2.40%	1.80%
ID	552,404	671,786	787,929	915,021	1,628,830	3.20%	2.20%
IL	6,439,873	6,821,755	7,416,309	7,601,747	10,256,955	1.00%	0.90%
IN	3,089,817	3,399,530	3,673,247	3,744,661	5,168,105	1.20%	1.00%
IW	1,645,944	1,795,644	1,934,077	2,027,293	2,786,556	1.30%	1.10%
KS	1,483,043	1,609,299	1,771,218	1,844,852	2,654,604	1.40%	1.20%
KY	1,918,471	2,122,906	2,332,023	2,432,901	3,544,631	1.50%	1.20%
LA	2,018,862	2,209,120	2,404,237	2,439,028	3,561,087	1.20%	1.10%
ME	706,689	710,076	792,255	844,635	1,196,418	1.10%	1.10%
MD	2,759,870	2,788,164	3,091,547	3,413,120	4,992,186	1.30%	1.20%
MA	3,646,584	3,679,800	4,096,551	4,216,027	5,791,533	0.90%	0.90%

*Southwest Georgia Interstate Study*



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

State Abbreviation	BEA 1990	BEA 1995	BEA 2000	BEA 2006	BEA 2040	BEA Annual Growth Rate (1990~2006)	Forecasted Annual Growth Rate (1990~2040)
MI	4,824,727	5,174,594	5,629,498	5,542,222	7,595,229	0.90%	0.90%
MN	2,711,618	3,014,905	3,343,518	3,571,011	5,463,838	1.70%	1.40%
MI	1,209,606	1,373,875	1,492,672	1,531,373	2,231,751	1.50%	1.20%
MO	2,993,361	3,217,944	3,497,220	3,671,337	5,172,231	1.30%	1.10%
MT	436,338	506,891	559,055	637,401	1,021,109	2.40%	1.70%
NE	994,282	1,077,348	1,183,320	1,240,199	1,784,649	1.40%	1.20%
NV	766,439	963,957	1,267,999	1,611,936	3,389,383	4.80%	3.00%
NH	647,635	684,551	784,839	861,053	1,379,775	1.80%	1.50%
NJ	4,344,458	4,330,143	4,755,379	5,114,577	7,029,866	1.00%	1.00%
NM	767,139	904,934	972,954	1,099,401	1,732,000	2.30%	1.60%
NY	9,817,397	9,601,228	10,455,409	10,952,095	13,886,888	0.70%	0.70%
NC	3,928,125	4,380,498	4,924,918	5,317,153	8,229,379	1.90%	1.50%
ND	376,396	420,792	447,380	485,172	686,703	1.60%	1.20%
OH	5,904,767	6,340,680	6,835,688	6,893,151	9,269,549	1.00%	0.90%
OK	1,664,461	1,810,296	2,015,085	2,144,708	3,132,334	1.60%	1.30%
OR	1,638,149	1,858,019	2,110,915	2,304,410	3,699,006	2.20%	1.60%
PA	6,342,434	6,471,174	6,973,171	7,295,987	9,467,209	0.90%	0.80%
RI	555,265	541,109	583,826	619,991	799,381	0.70%	0.70%
SC	1,925,779	2,050,657	2,291,238	2,441,522	3,583,074	1.50%	1.20%
SD	412,013	475,042	519,228	555,921	835,940	1.90%	1.40%
TN	2,796,010	3,164,061	3,496,446	3,724,901	5,678,255	1.80%	1.40%
TX	9,304,146	10,507,238	12,244,699	13,514,130	22,511,668	2.40%	1.80%
UT	944,329	1,157,659	1,387,847	1,591,476	2,911,652	3.30%	2.30%
VT	343,568	364,634	404,463	434,333	642,121	1.50%	1.30%
VA	3,726,176	3,931,060	4,407,324	4,859,015	7,377,041	1.70%	1.40%
WA	2,862,956	3,123,229	3,551,468	3,868,813	5,904,793	1.90%	1.50%
WV	782,852	844,350	886,620	927,285	1,208,904	1.10%	0.90%
WI	2,834,282	3,139,722	3,431,272	3,611,453	5,290,009	1.50%	1.30%
WY	272,431	302,472	328,036	376,249	559,782	2.00%	1.50%

Source: Bureau of Economic Analysis (BEA)



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

Table 2.3.2  
County Employment Forecast for 2040 within the Study Area

County	GA DOL 1990	GA DOL 2000	GA DOL 2006	Forecasted 2040	GADOL Annual Growth Rate (1990~2006)	Forecasted Annual Growth Rate (1990 ~ 2040)
Baker	633	596	523	540	-1.2%	-0.3%
Brooks	3,422	3,234	3,016	3,110	-0.8%	-0.2%
Calhoun	1,385	1,590	1,594	2,098	0.9%	0.8%
Chattahoochee	5,914	1,299	1,382	1,427	-8.7%	-2.8%
Clay	566	665	831	1,439	2.4%	1.9%
Colquitt	12,308	15,122	16,222	25,327	1.7%	1.5%
Cook	4,046	5,770	4,780	6,538	1.0%	1.0%
Crisp	7,905	8,892	8,910	11,391	0.8%	0.7%
Decatur	10,307	11,594	10,244	10,570	0.0%	0.1%
Dooly	2,646	3,685	3,446	5,308	1.7%	1.4%
Dougherty	47,672	53,860	51,638	61,906	0.5%	0.5%
Early	4,801	4,469	4,694	4,794	-0.1%	0.0%
Grady	6,000	5,932	6,454	7,667	0.5%	0.5%
Lee	1,856	3,686	4,874	11,633	6.2%	3.7%
Lowndes	31,723	43,754	49,403	89,734	2.8%	2.1%
Macon	4,142	4,114	3,637	3,755	-0.8%	-0.2%
Marion	1,409	2,201	1,714	2,437	1.2%	1.1%
Miller	1,233	1,465	1,699	2,770	2.0%	1.6%
Mitchell	5,978	8,839	8,850	15,427	2.5%	1.9%
Muscogee	76,464	98,396	97,937	148,183	1.6%	1.3%
Quitman	166	279	422	1,001	6.0%	3.7%
Randolph	2,384	2,466	2,202	2,273	-0.5%	-0.1%
Schley	997	1,250	1,424	2,403	2.3%	1.8%
Seminole	2,229	2,647	2,348	2,690	0.3%	0.4%
Stewart	1,059	1,224	1,063	1,109	0.0%	0.1%
Sumter	12,216	14,526	12,836	14,608	0.3%	0.4%
Terrell	2,930	2,613	2,414	2,490	-1.2%	-0.3%
Thomas	17,127	21,136	23,813	39,211	2.1%	1.7%
Tift	16,908	20,990	21,015	30,702	1.4%	1.2%
Turner	1,988	2,352	2,628	4,120	1.8%	1.5%
Webster	366	456	550	972	2.6%	2.0%
Worth	3,256	3,479	3,448	3,973	0.4%	0.4%
<b>Grand Total</b>	<b>292,036</b>	<b>352,581</b>	<b>356,011</b>	<b>521,606</b>	<b>1.2%</b>	<b>1.2%</b>

Source: Georgia Department of Labor (GADOL)

The state and county level employment were allocated to the TAZs according to the buffer layers as had been done in the allocation of the population. The state and county projections were directly allocated into the TAZs that are either states or counties. For TAZs at sub-county level, the future county level employment was distributed to TAZs according to the base year employment

*Southwest Georgia Interstate Study*



# Southwest Georgia Interstate Study

## Technical Memorandum

### Socioeconomic & Demographic Data

distribution pattern. The resulting future employment for the study area is shown in figure 2.3.8. The future year employment by sector was also estimated according to the base year employment type distribution. The 2006 share of each employment sector relative to the total employment of each zone was calculated and then applied to the future zonal employment to estimate the future count. Table 2.3.3 shows the future employment by sector within the study area.

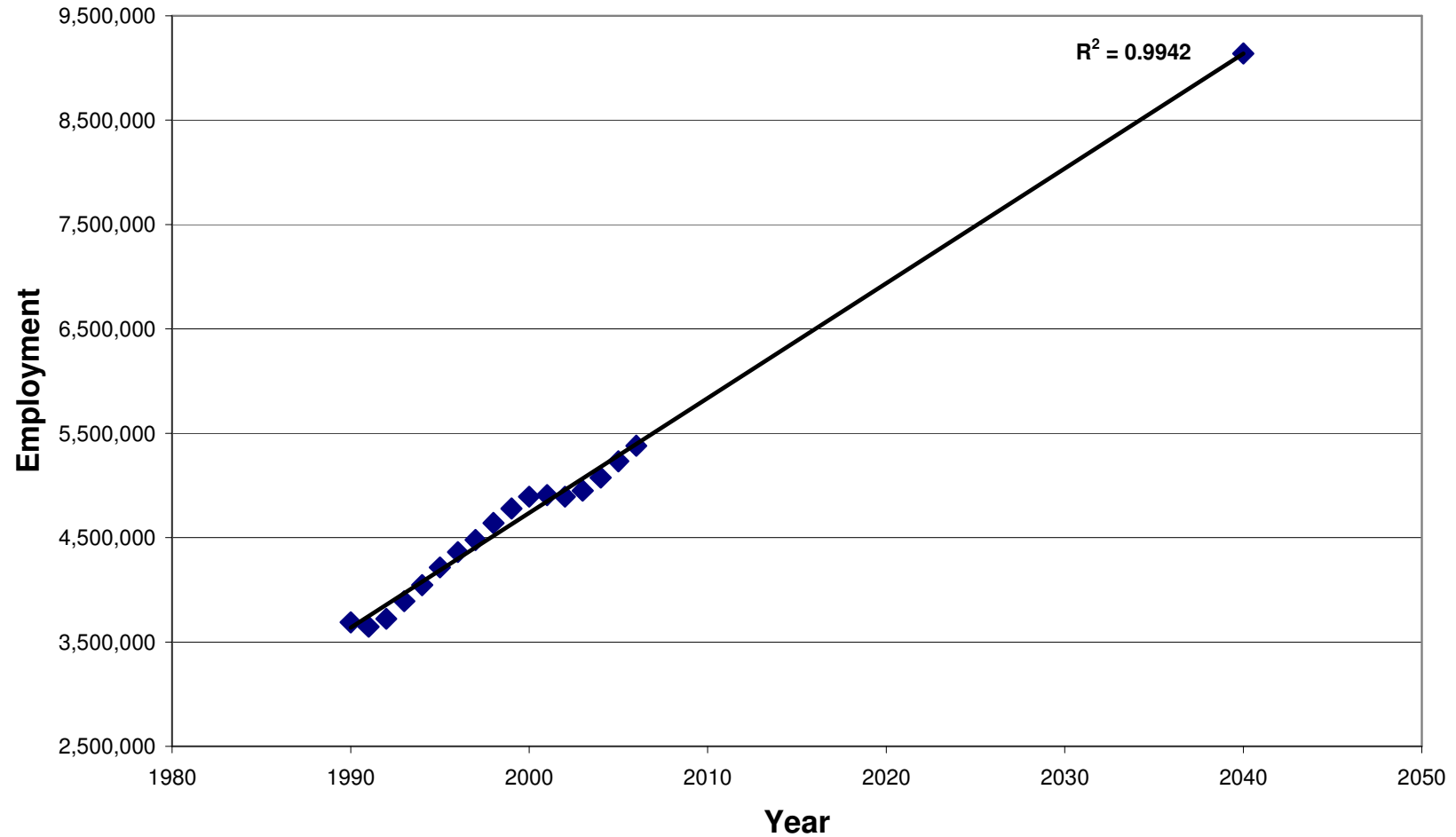
**Table 2.3.3**  
**2040 County Employment by Sector**

COUNTY	AMC	MFG	WFW	RET	SER
Baker	72	0	7	48	413
Brooks	599	574	130	292	1,516
Calhoun	243	335	95	192	1,235
Chattahoochee	55	0	57	90	1,225
Clay	432	0	22	174	810
Colquitt	3,641	6,184	1,119	2,947	11,444
Cook	1,148	1,446	190	617	3,133
Crisp	827	1,557	905	1,984	6,119
Decatur	1,419	1,422	754	1,603	5,369
Dooly	213	1,878	570	466	2,179
Dougherty	2,700	7,080	4,641	7,863	39,628
Early	533	1,036	484	375	2,364
Grady	1,313	1,124	506	938	3,786
Lee	2,624	545	859	1,296	6,307
Lowndes	5,537	9,968	5,014	15,097	54,126
Macon	355	1,015	90	438	1,856
Marion	308	958	41	196	933
Miller	234	56	315	382	1,784
Mitchell	1,004	5,832	776	1,443	6,371
Muscogee	7,073	14,977	4,352	17,311	104,475
Quitman	121	185	107	103	485
Randolph	417	201	118	174	1,363
Schley	61	1,305	131	123	785
Seminole	274	140	175	409	1,690
Stewart	67	115	64	96	766
Sumter	1,448	2,620	933	1,640	7,967
Terrell	121	524	264	286	1,295
Thomas	2,249	5,915	2,211	3,932	24,904
Tift	2,520	4,257	3,947	3,924	16,053
Turner	203	636	388	594	2,303
Webster	54	516	41	46	316
Worth	383	280	223	641	2,444

Source: Georgia Department of Labor (GADOL)

Southwest Georgia Interstate Study

# Employment Trend (Georgia)



**Southwest Georgia  
Interstate Study**

**Future Employment**

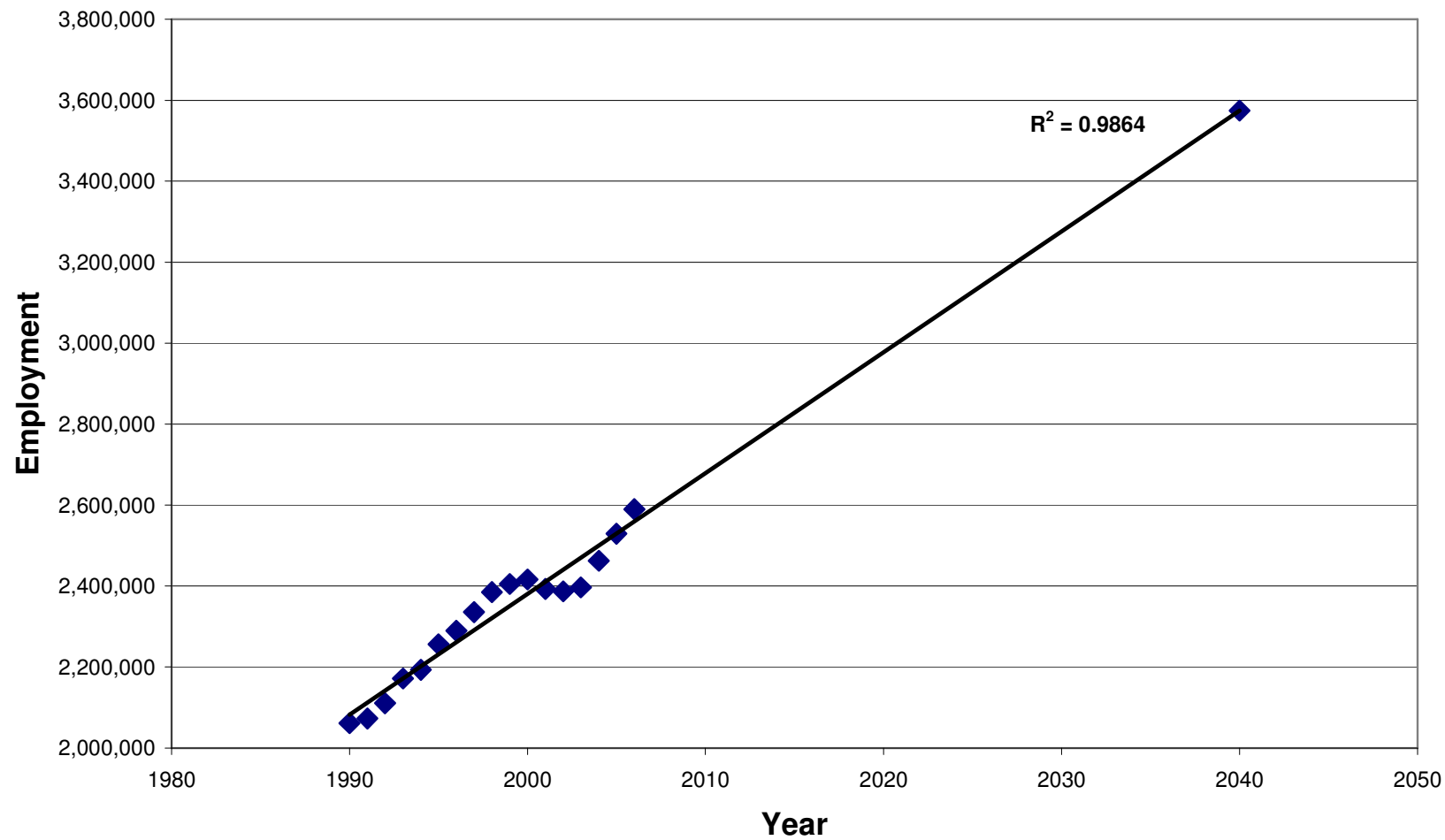
*Socioeconomic &  
Demographic Data*

**Figure 2.3.1**

*Southwest Georgia Interstate Study*

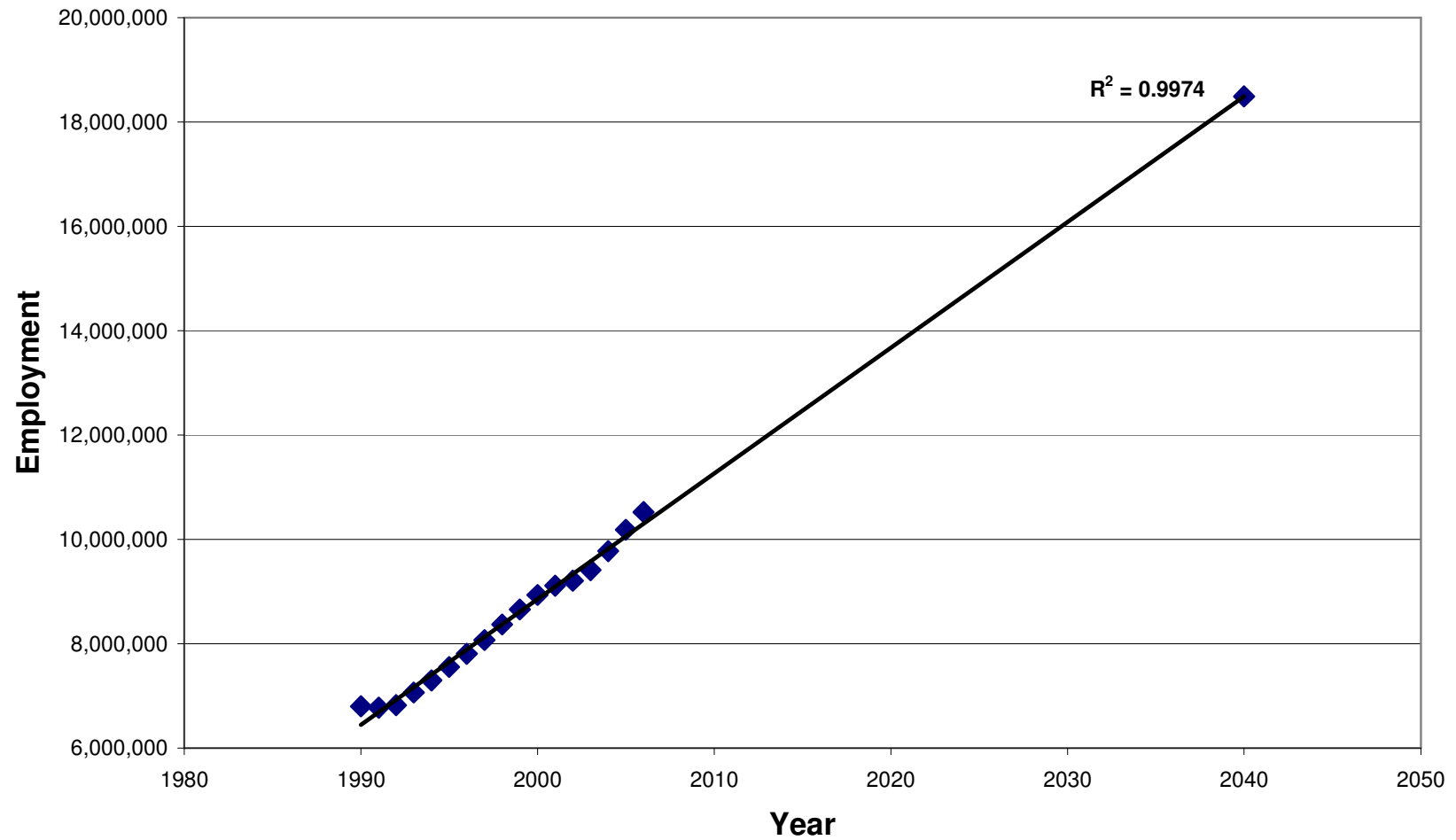


# Employment Trend (Alabama)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Employment</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.3.2</b>

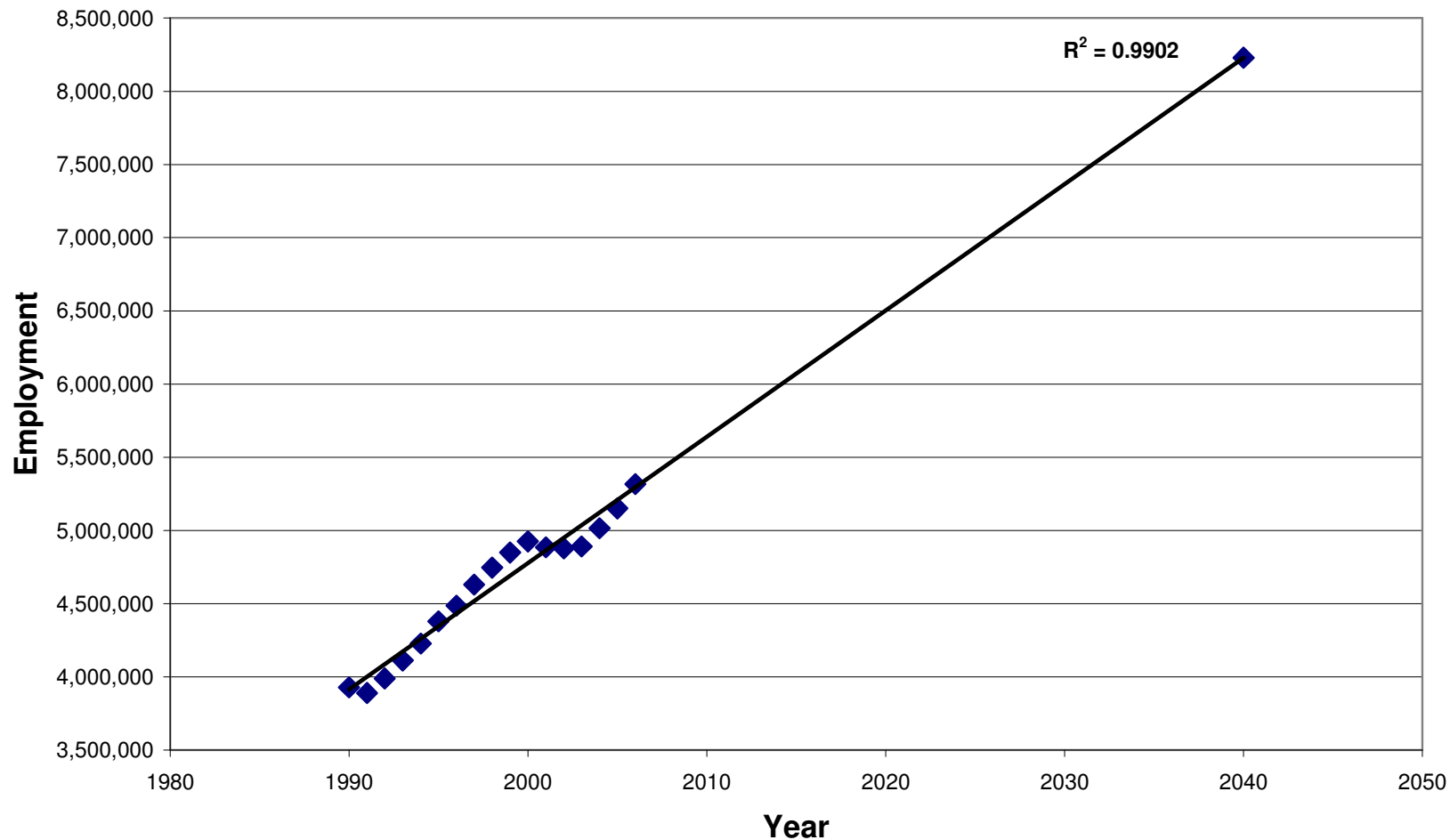
# Employment Trend (Florida)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Employment</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.3.3</b>

*Southwest Georgia Interstate Study*

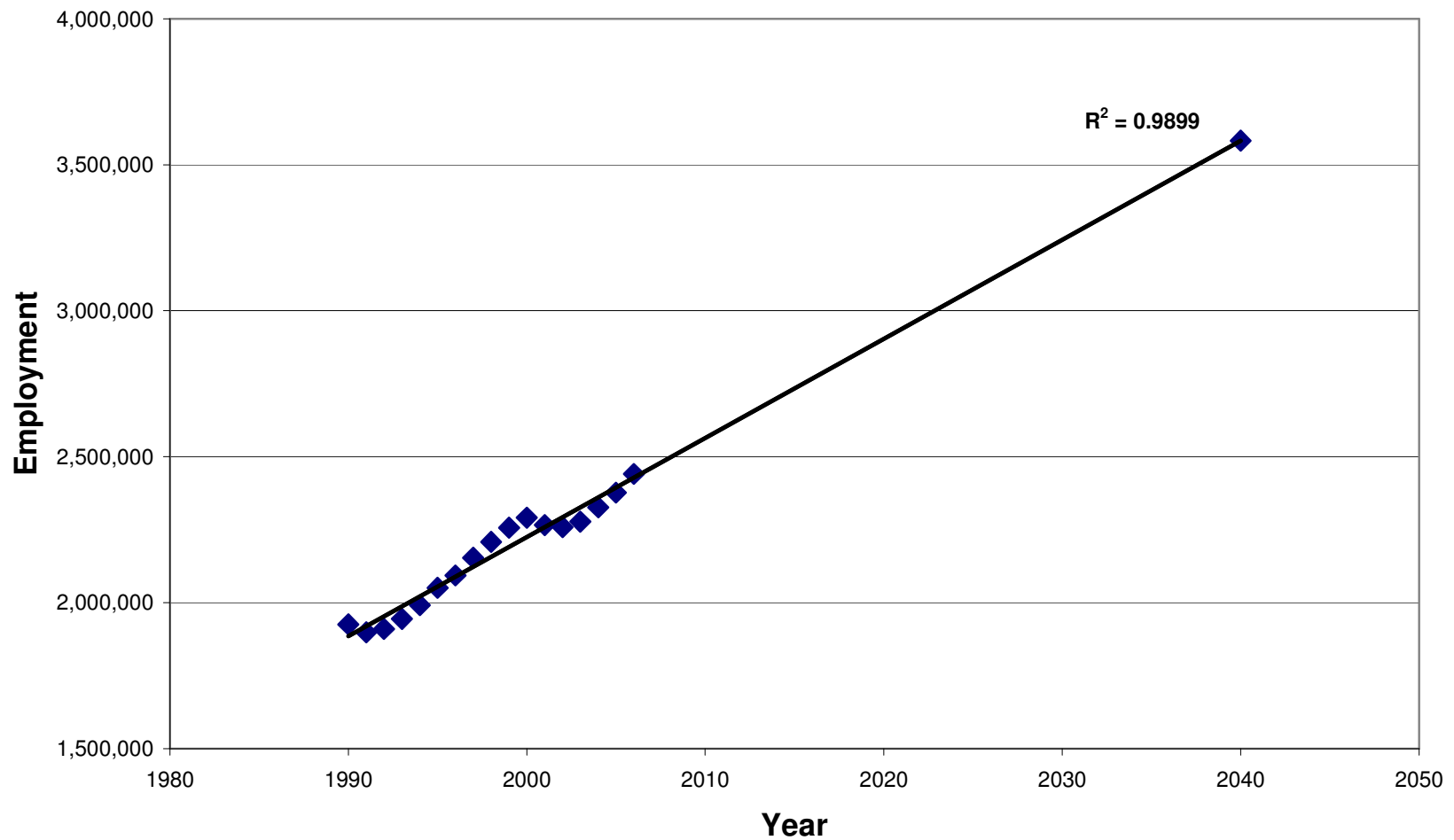
# Employment Trend (North Carolina)



	<b>Southwest Georgia Interstate Study</b>	
	<b>Future Employment</b>	
	<i>Socioeconomic &amp; Demographic Data</i>	<b>Figure 2.3.4</b>

*Southwest Georgia Interstate Study*

# Employment Trend (South Carolina)



**Southwest Georgia  
Interstate Study**

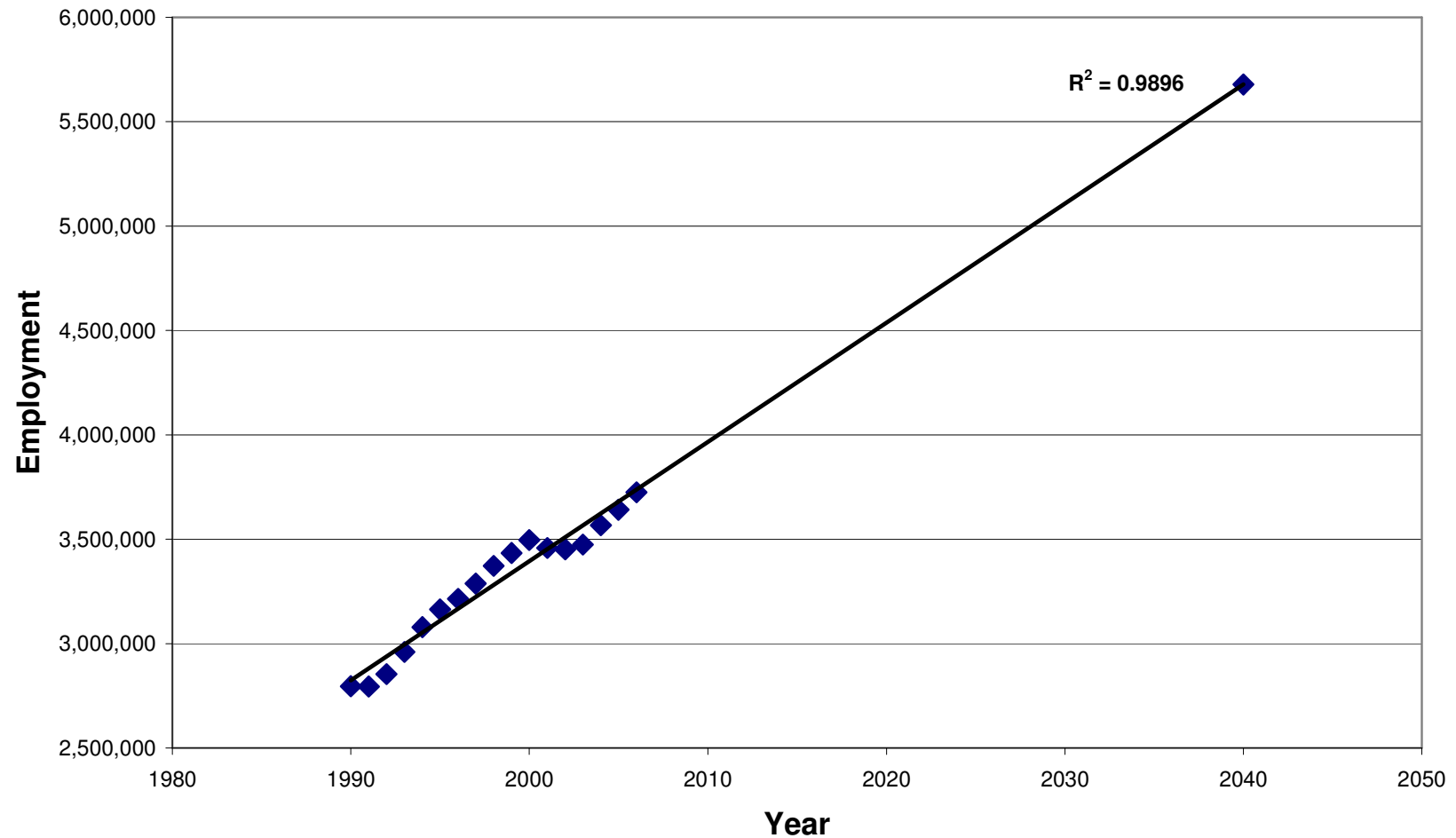
**Future Employment**

*Socioeconomic &  
Demographic Data*

**Figure 2.3.5**

*Southwest Georgia Interstate Study*

# Employment Trend (Tennessee)



**Southwest Georgia  
Interstate Study**

**Future Employment**

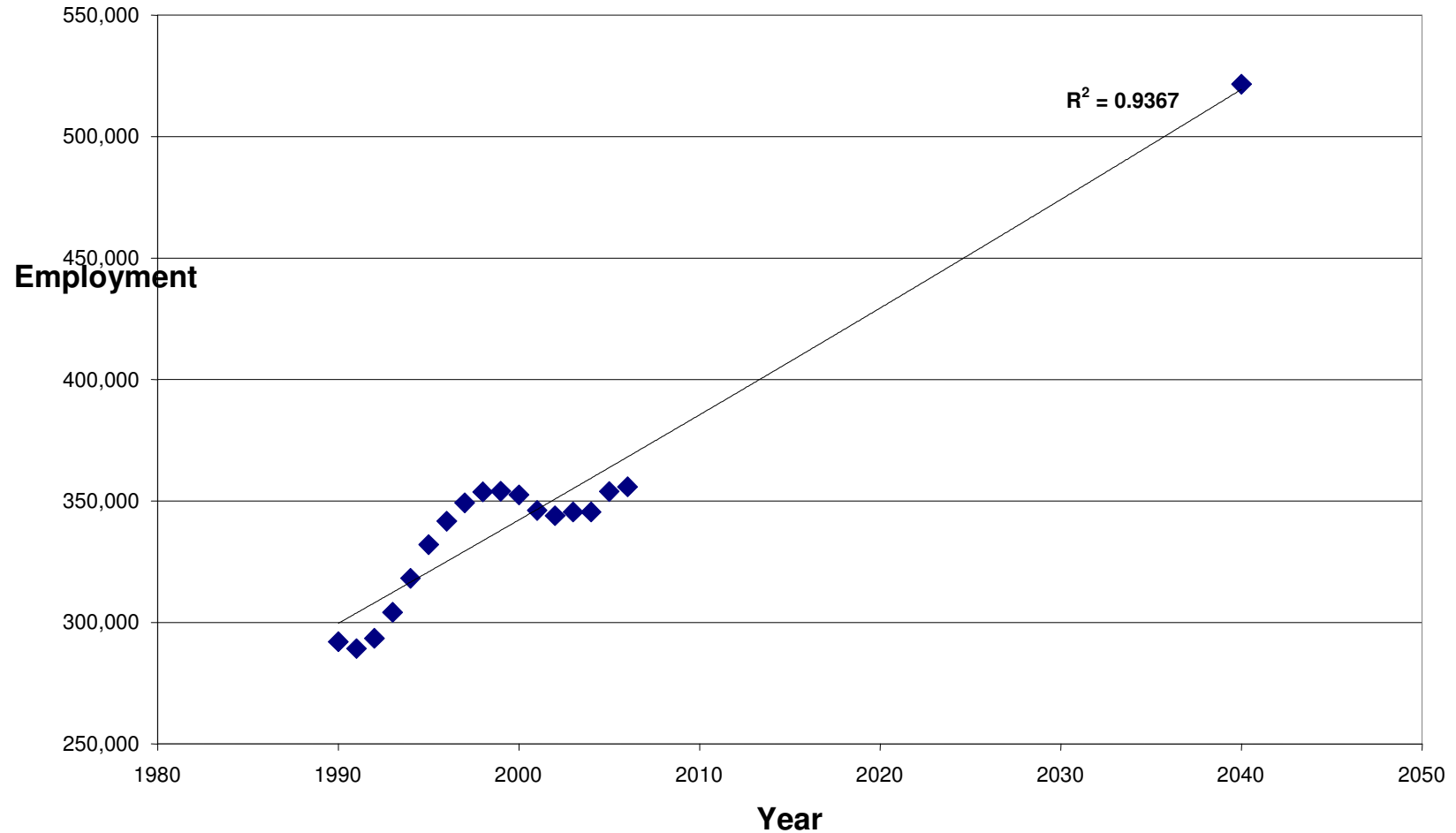
*Socioeconomic &  
Demographic Data*

**Figure 2.3.6**

*Southwest Georgia Interstate Study*



# Employment Trend (Study Area)



**Southwest Georgia  
Interstate Study**

**Future Employment**

*Socioeconomic &  
Demographic Data*

**Figure 2.3.7**

*Southwest Georgia Interstate Study*

